# Journal

Magazine of the World's Largest & Most Influential Association of Tube & Pipe Engineers





















Dr. Gunther Voswinckel President ITA

Dear colleagues from the Tube and Pipe industry, dear readers of the ITAtube Journal,

The Corona pandemic seems to be under control and the impact on the supply of goods has improved. Logistics costs have returned to near normal levels. The galloping inflation has slowed down. Raw material costs for hot rolled coils, plates and round billets have passed their peaks. Pipe prices are still high and the OCTG market is booming, especially in the US. The situation for the tube industry seems rosy, were it not for the geopolitical turmoil and difficult energy costs in most parts of the world, especially in Europe.

While our thinking and actions over the past 70 years have been shaped by the assumption that international trade strengthens peaceful coexistence in the world, we had to painfully realise at the beginning of this year that this maxim unfortunately has only limited validity.

This painful realisation now has a direct and significant impact on the further strategic orientation of our industry. Whereas previously only quality, delivery time and costs were decisive, geopolitical and logistical risk considerations are now increasingly coming to the fore. All sources of supply are being critically scrutinised, and one can only hope and warn that international trade will not suffer too much as a result.

The increasing momentum in the rebalancing of the energy market continues to drive demand for pipes. Markets such as the USA, India, Europe and the Arab states are characterised by high demand for steel products and pipes. Some steel and pipe producers and engineering companies operating or equipping high-capacity plants have been able to massively increase their economic success.

Despite the travel restrictions caused by the corona pandemic, the International Tube Association ITA has been successful in maintaining the exchange in our industry. The ITA is hosting several webinars for our tube industry in 2020, 2021 and 2022. In addition, we have also participated in some webinars conducted by other renowned organisations with our tube market overviews.

It was great to see that our largest industry event, Tube Düsseldorf 2022, and the regional event Tube India 2022 were well attended and once again provided an opportunity for our industry to meet and share the latest innovations. In addition to the trade fairs, the ITA also organised web-based and hybrid conferences. The positive response to these events was indicative of the impressive optimism in our tube industry

Yours faithfully

ITA Team

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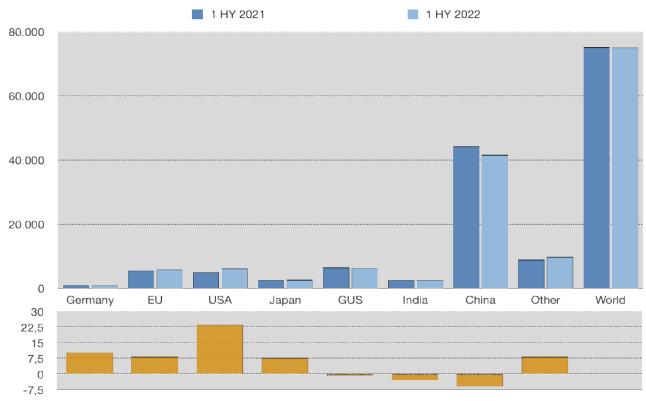
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### World Steel Tube Production - Review

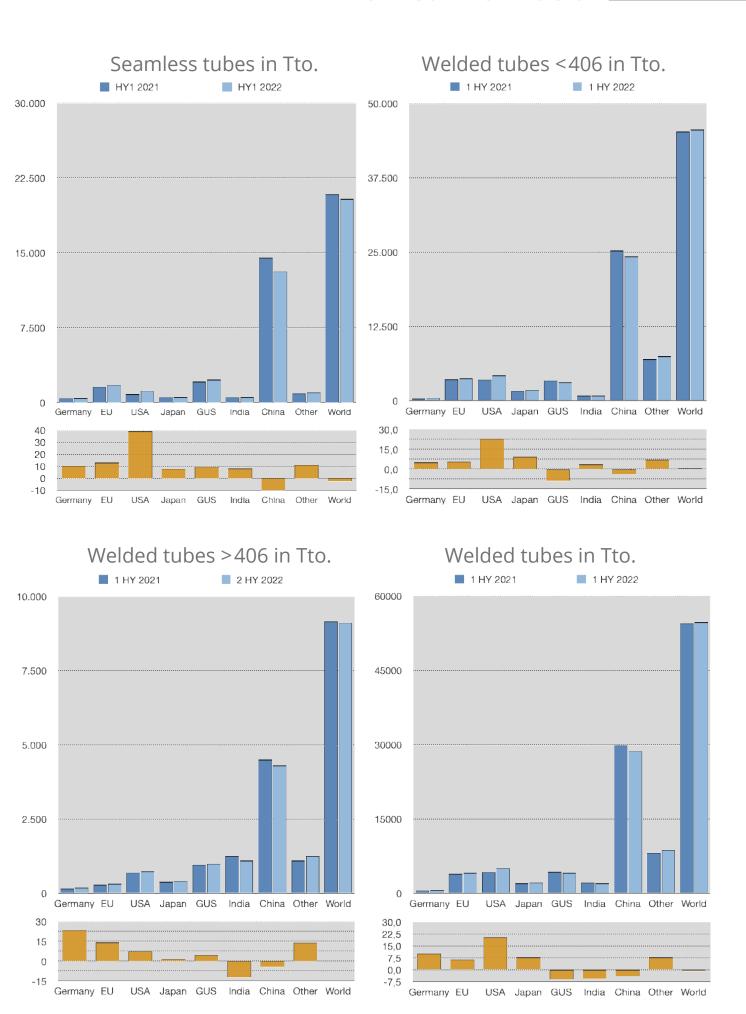
In the first half of 2022, 75 million tonnes of steel pipes were produced. Compared to the first half of 2021, this represents an increase of 0.2 % - i.e. only a slight change. The production of seamless tubes fell worldwide by 2.3 % to 20.3 million tonnes, with the increase in the USA standing out particularly clearly at 39.8 %.

Europe also recorded a positive result in the seamless pipe market with an increase of 13.3 % and an increase of 8.2 % in total production. Chinese steel pipe producers produced 41.7 million tonnes, compare with H1 2021 a drop of 5.9%, while production in the US rose 23.5% to 6.2 million tonnes. In addition to Europe, USA, Japan also recorded a growth of 7.8%, compared to the 1st half of 2021.

#### Total in Tto.



	sear	nless tu	ıbes	welde	d tubes	<406	welde	ed tube	s>406	we	lded tuk	oes		TOTAL	
Region/ country	HY1 2021	HY1 2022	in %	HY1 2021	HY1 2022	in %	HY1 2021	HY1 2022	in %	HY1 2021	HY1 2022	in %	HY1 2021	HY1 2022	in %
EU	390	430	10.3	400	420	5.0	150	185	23.3	550	605	10.0	940	1,035	5 10.1
EU	1,544	1,750	13.3	3,600	3,800	5.6	320	720	14.3	3,880	4,120	6.2	5,424	5,870	8.2
USA	830	1,160	39.8	3,500	4,300	22.9	690	740	7.2	4,190	5,040	20.3	5,020	6,200	23.5
Japan	510	550	7.8	1,600	1,750	9.4	390	395	1.3	1,990	2,145	7.8	2,500	2,695	5 7.8
CIS	2,100	2,300	9.5	3,400	3,100	-8.8	950	990	4.2	4,350	4,090	-6.0	6,450	6,390	0.9
India	480	520	8.3	850	880	3.5	1,250	1,100	-12.0	2,100	1,980	-5.7	2,580	2,500	3.1
China	14,500	13,100	9.7	25,300	25,300	-4.0	4,500	4,300	-4.4	29,800	28,600	-4.0	44,300	41,70	0-5.9
Other	900	1,000	11.1	7,000	7,000	7.1	1,100	1,250	13.6	8,100	8,750	8.0	9,000	9,750	8.3
World	20,864	20,380	2.3	45,250	45,250	0.8	9,160	9,095	0.7	54,410	54,725	-0.6	75,274	75,10	5 0.2



ITAtube Journal December 2022

Dr. Gunther Voswinckel, VOSCO GmbH

# World Tube & Pipe Market: Factors influencing the current situation

Dr. Gunther Voswinckel - Update as per December 2022

Welcome to ITA's and VOSCO´s regular presentation of the main worldwide economic factors influencing the tube and pipe industry.

In many regions of the world, the corona pandemic seems to be under control. Nevertheless, we can understand its impact on the supply of goods, especially in China, where some important cities are again affected by corona lock down.

The Ukraine war represented another striking turning point this year. Russia, as one of the main suppliers of fossil energy commodities, gas and oil, was hit with sanctions as a result of its invasion of Ukraine. Europe in particular, which is highly dependent on Russian gas and oil supplies, is being hit hard by the resulting skyrocketing energy prices. The consequences of the cost increases are unevenly distributed across the world. Regions such as the USA, India, Turkey and China are benefiting from lower energy costs. In addition, massively rising inflation and its countermeasures threaten our industry and present it with unexpected challenges that are difficult to calculate. As always in such disruptive times, we see crisis winners who maximise their profits - but also crisis losers who have to fear for their existence. Due to the dynamics of these developments, it is usually very difficult for the crisis losers to react appropriately. As a result, some regions are looking for suitable political countermeasures to compensate for their cost disadvantages.

Whereas previously only quality, delivery time and costs were decisive, geopolitical and logistical risk considerations as well as current and future energy costs are now increasingly taking centre stage. All sources of supply are being critically scru-

tinised and one can only hope and warn that international trade will not suffer too much as a result. In particular, the regional differences in energy prices will have an impact on the current landscape of the energy-intensive steel industry. For many years, Europe benefited from relatively cheap pipeline gas from Russia. As this will no longer be available for some time, Europe will have to compensate for these supplies with much more expensive other sources. As a result, energy prices will remain at a much higher level unless Europe produces more gas from its own territories despite all political opposition. On the other hand, regions like the US, China and India will continue to expand their energy-intensive industries because energy costs are much lower there.

More than 70 % of total world pipe production, i.e. about 110 million tonnes, is welded pipe. Welded tubes are highly dependent on hot-rolled coil prices and, to a lesser extent, on plate prices. Average prices for hot-rolled coils jumped from September 2020, from around USD 450, to a peak of USD 2,000 in September 2021. Prices then fell throughout 2022 to around USD 620. This price rally posed major challenges to our pipe industry. Although tube prices also peaked, the price increase was higher for hot-rolled coils than for welded tubes. Most forecasts now predict that prices for hot-rolled coils will settle down and increase by a maximum of another 80 UDS by 2023. But demand for pipes is also calming down with similar effects on prices. Prices for commodity pipes in Europe are currently around 830 USD/tonne, resulting in a value added of only 210 USD/tonne at most. Only the US market is still quite demanding at a high price level. OCTG pipes, which have a

much higher material requirement, are traded at prices of about 3,000 to 4,000 USD/tonne in the USA.

Further opportunities are expected as new pipeline networks need to be built to follow oil and gas logistics as the war in Russia has made some of the existing pipeline system obsolete. Transporting oil and gas by pipeline is by far cheaper and more environmentally friendly than transporting LNG by ship.

Logistics costs have only recently fallen to normal levels, reducing supply bottlenecks for the steel industry.

Another challenge arises if policies to prevent climate change, such as the additional carbon costs agreed by the European Union, are not introduced in a balanced way. These impacts may also cause industries that consume a lot of energy to move to regions with lower costs. The confidence to compete on the world market with these additional costs in the future is fading for some pipe manufacturers.

Pipe mill infrastructure in terms of pipe mills and finishing lines as well as digitalisation and applied quality assurance systems also play an important role. Increasing importance is attached to agile management strategies in terms of customer benefits, process and product quality improvement as well as purchasing processes using "Industry 4.0" measures.

With a view to the return to normality, it can be seen that both plant manufacturers and technology suppliers are increasingly finding interesting business opportunities in this new market segment. Some technology suppliers have already reacted to this and expanded their product portfolio to include digital solutions.

The International Tube Association has organised several well-attended webinars in 2020, 2021 and 2022 to maintain the exchange within our industry. This year, in May 2022, "Engineered Tubes

for the Automotive Industry" and in November 2022, along with the Tube India 2022 exhibition, a hybrid congress titled "Emerging Technology and Innovations in Pipe & Tube Industry" was successfully organised by the ITA Indian Chapter. It was great to meet both tube manufacturers and suppliers to the tube industry at our world's largest tube trade fair 'Tube Düsseldorf 2022' and the regional trade fair 'Tube India 2022' in Mumbai. The positive response to these events is a sign of the impressive optimism in our tube industry.

The high cost of energy is a major challenge for our industry. The prices for gas (Figure 1) and electrical energy (Figure 2) are causing dark clouds over our steel and tube industry.

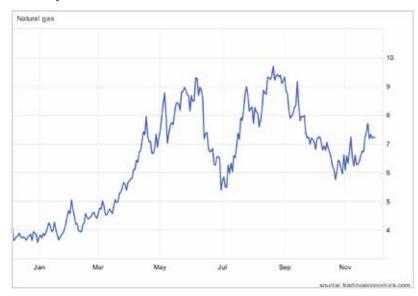


Figure 1: Natural Gas price development 1 year up to 30th of November 2022 (USD/MMBtu), Source: Trading Economics.com

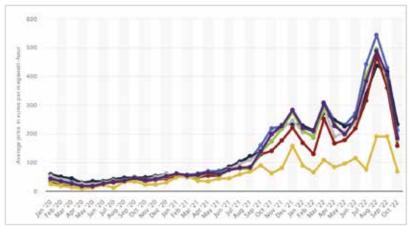


Figure 2: Average monthly electricity wholesale prices in selected countries in the European Union (EU) from January 2020 to October 2022
Source: Statista.com

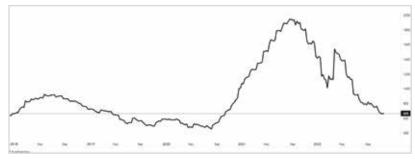


Figure 3: U.S. Domestic Hot-Rolled Coil Steel Futures Chart (average), Source: TradingView.com

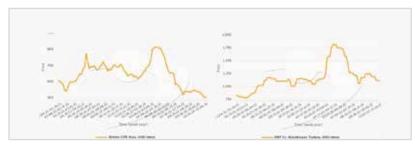


Figure 4: Average Billet and Plate Prices, Source: SteelOrbis

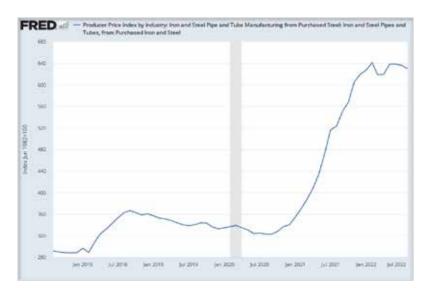


Figure 5: Average Steel Tube and Pipe Prices , Source: US Bureau of Labor Statistics

The price of gas peaked at around USD 9.8 at the end of August 2022, i.e. about 250% higher than at the beginning of 2022. Since November 2022 (USD 6), the price of natural gas has risen again to around USD 7.5. Gas can only be transported over long distances by ships as LNG (liquefied natural gas), which requires expensive treatment compared to natural gas transported by pipeline. For the liquefaction around 10-25 % of the calorific value of the natural gas is consumed. Therefore, regions like North America benefit from much lower gas costs as they have their own gas resources that can be used directly as natural gas. Europe has benefited for many years from cheap Russian pipeline gas, but now and in the

future Europe will have to rely on much more expensive LNG gas, which means a significant cost disadvantage of about 20% for energy-intensive industries such as the steel and pipe industries. It remains a major political challenge to secure that this cost disadvantage will be overcome to ensure European energy intensive industry to be again cost wise at eye level with the industry in other regions. To explore more of the own regional European gas resources may be a valid option hereto.

Electrical energy, the other major source of energy for the steel and tube industry, has also seen massive price increases, peaking in Europe in August 2022 (€500) and increasing tenfold compared to January 2020 (€50)!

Since 22 August, the price of electrical energy has dropped to €150, but still remains three times higher than in January 2020 (about €50).

Compared to Europe, electrical energy prices in the US are far lower, only about 30% of European prices. This price difference is another disadvantage for the energy-intensive European steel and pipe industry.

Pipe manufacturers buy hot-rolled coils, round billets or plates as input material for their production lines.

More than 70 % of the total world pipe production, i.e. about 110 million tonnes/ year, are welded pipes. Welded tube producers are highly dependent on hot rolled coil prices and to a lesser extent on plate prices. Average prices for hot-rolled coils started to spike in September 2020 (around USD 450) and peaked at USD 2,000 in September 2021. Since then, prices have fallen to around 620 USD throughout 2022. However, a further maximum price increase of 80 USD/tonne is expected again for 2023.

Steel plate prices rose to an average price of around USD 1,800/tonne in the first quarter of 2022 and are now trading at an average of around USD 1,000/tonne in November 2022 (Figure 4).

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Billet prices, used for seamless tubes have not risen nearly as much as hot rolled coil prices, yet these prices have also cooled from average 810 USD/tons to an average of around 500 USD/tonne (Figure 4).

This price rally has posed major challenges for our tube industry. Although pipe prices also reached all-time highs, the price increase was higher for hot-rolled coils in particular than for welded pipes, leading to an erosion of pipe manufacturers' margins in many regions of the world (Figure 5).

as an example, so far about 20% of pipe imports have been served by Russia and the Ukraine. In the case of seamless pipes, the import share from Russia and Ukraine was even as high as 40%. These volumes need to be supplied by other tube and pipe producers. Russian shipments in 2022 will decrease by 34% on-year to 1.06 million tonnes, the RBC newspaper reports, citing a presentation from fund director Alexander Semenchishin. Domestic consumption in Russia is seen decreasing by 2% on-year in 2022 to 9.12 Mio. tons. As a result, pipe production will fall by 5.5% to 10.04 Mio. tons. Many regions of the world such as Europe and North America need to compensate their pipe and tube imports from Russia and Ukraine.

As a result of the increased demand and the lower supply of pipes, pipe prices have risen by more than 50% compared to the previous year 2021 (Figure 6)

Until the beginning of October, pipe prices were still holding at high levels, but in November fears are being voiced from many regions that demand for pipes is weakening, which has an immediate impact on prices. Only the US is still reporting a sustained high for pipes. The expected decline in pipe demand and its negative impact on prices seems to be slower than the decline in prices for the input materials hot-rolled coils, plates and round billets. This would allow some pipe producers to compensate for some of the margin losses they suffered when input material prices exploded. The world tube and pipe production after a slight recovery in 2021 of 5%,

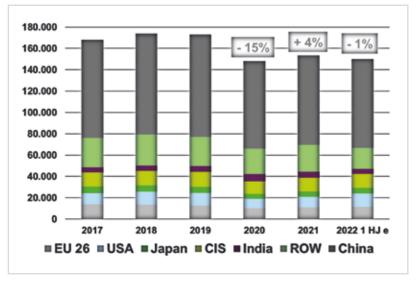


Figure 6: World Tube and Pipe Production 2017 – 2022e , Source: Wirtschaftsvereinigung Stahlrohre e.V.

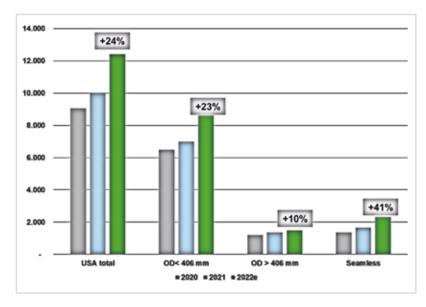


Figure 7: USA - Tube and Pipe Production 2020 – 2022e, Source: Wirtschaftsvereinigung Stahlrohre e.V.

was maintaining its world production level at about 150 Mio. tons in 2022.

Anyhow substantial regional differences are reported. Whereas the rest of the world (-22%) and India (-14%) suffer from less production of tube and pipes, the USA, driven by a strong OCTG and construction market report major growth in production (Figure 7).

Due to the coronal pandemic, supply chains and freight costs were severely affected. This situation has now improved. The supply chain pressure index has improved significantly, from index values of 4 at the

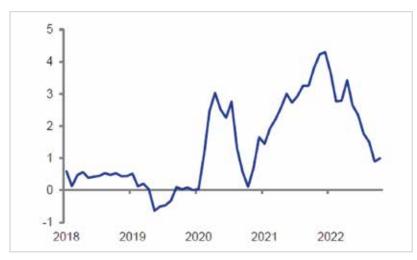


Figure 8: Global Supply Chain Bottlenecks, index, Source: Federal Reserve Bank of New York

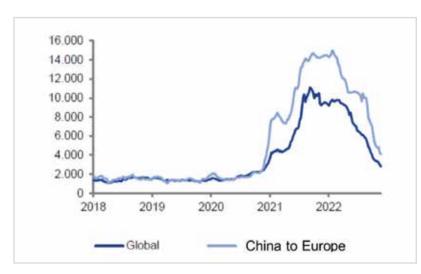


Figure 9: Freight Rates - Global and China to Europe in USD, Source: Bloomberg

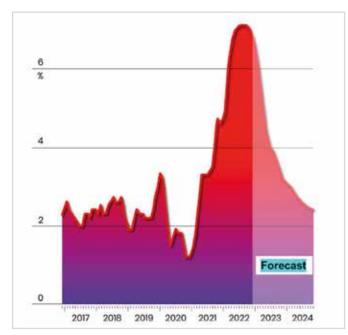


Figure 10: Inflation declines - Global consumer price index inflation since 2016 and forecast to November 2024 (%), Source: Morgan Stanley, The Pioneer

beginning of 2022, the index has returned to normal values of around 1 this November (Figure 8).

Freight rates have also returned to near normal rates (Figure 9). Global rates of USD 10,000 at the beginning of 2022 have now fallen back to around USD 3,000. Freight rates from China to Europe of 14,000 USD at the beginning of 2022 have settled down to freight rates of around 3,500 USD in October 2022.

These are good news for the industry and contributes to the recovery of international trade.

Another good sign for our industry can be seen in the prognosis, that Inflation has passed its maximum and shall further decline until 2024. The affords of the central banks, especially these of the US FED, has stopped the galloping inflation and reversed the trend (Figure 10). Anyhow we hope that Morgan Stanley does not see the situation too optimistic.

In addition to the inflation rate, the producer price index is an important parameter, as it reflects the costs of the manufacturing industry. As Figure 11 shows, these costs vary greatly from region to region. Europe brings up the rear here due to the sharp rise in energy costs.

As already explained, the USA has here compared to Europe a significant advantage of more than 22% due to cheap local energy. China's cost situation is particularly advantageous here but is certainly shaped by weak demand due to the corona lockdowns.

As already stated, one major driver of the tube and pipe market is the OCTG market representing about 51% of the world tube and pipe production.

After Corona the industrial production has picked up and led to a sharp increase in energy consumption since 2021, so that supply has hardly been able to meet demand (Figure 12). Secondly, the geopolitical sanctions created a massive contraction of Russian production causing speculative

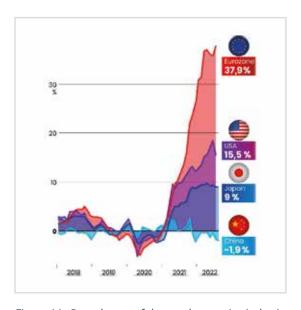


Figure 11: Growth rate of the producer price index in selected countries since 2018 (%), Source: DJE, Refinitiv, The Pioneer

Figure 12: Oil price WTl development 1 year up to 21st of November 2022 (US\$/Bbl,) Source: US Energy Information Administration

price increases (Figure 13). It is anticipated that the Russian Oil production may be reduced by up to 25%.

The corona lockdown in Shanghai at the end of March 22 briefly eased the situation on the price front, as demand for energy fell noticeably as a result (Figure 14). According to Platts estimates, China's April demand plummeted to 13.35 million Bbl/d, down 11.5% year-on-year, though recovering transportation demand may push May figures back above 14 million Bbl/d.

At the peak of lockdown mandates, gasoline and diesel demand in coastal regions dropped by as much as 40%, with a grand total of 45 cities with some form of movement restrictions.

Since July 22 (120 USD/Bbl) the prices for oil went down until early October 22 (77 USD/Bbl). The oil and gas producing countries reduced the supply volumes to stabilize the energy prices leading to a price corridor between 80 to 93 USD/Bbl (Figure 12).

The energy industry is booming, Aramco, the world's largest producer of fossil fuels, has become the world's most valuable company this first quarter 2022. Currently, there is no evidence that oil and gas producers are increasing supply to capture market prices. The USA anyhow, to soften the inflation, significantly increases the

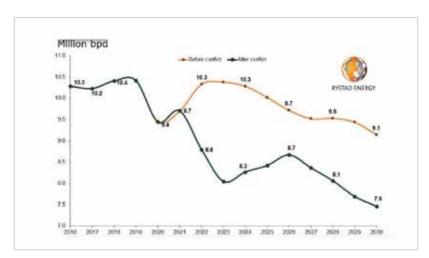


Figure 13: Russia crude Oil production before and after Invasion of Ukraine Source: Rystad Energy research and analysis

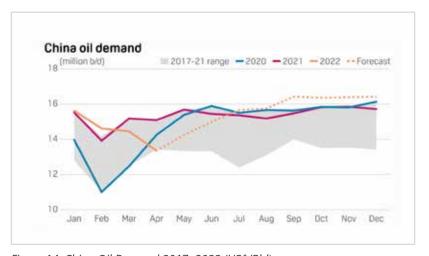


Figure 14: China Oil Demand 2017- 2022 (US\$/Bbl) Source: Oilprice.com, PLATTS

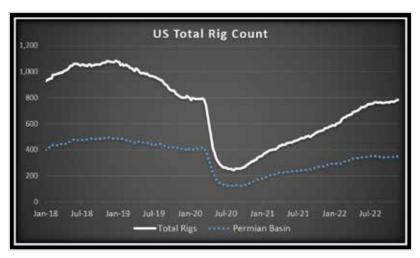


Figure 15: US Total Rig Count 4 years up to 25th of November 2022, Source: OilPrice.com

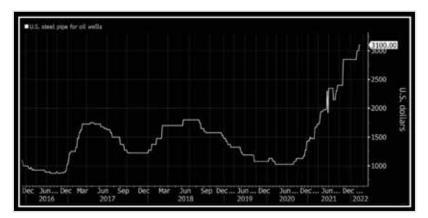


Figure 16: Skyrocketing Price of Pipe used for US Oil Drilling, Source: Kallanish Commodities, Bloomberg



Figure 17: Building with Tubular Structures, Column Trees and "Banana" Trusses,
Source: Civil.IITB

number of rigs from 531 in May 2021 to about 800 end of November 2022 (Figure 15).

Of these 784 rigs, 627 are dedicated for the extraction of oil and 155 for gas. The growth pattern has slightly calmed down, anyhow demand stays on high level. Efforts to reduce dependence on fossil fuels can hardly be successful in the short term and can only contribute to decoupling in the medium term. For our pipe industry, however, this means that high energy prices must be expected in the future as well. Luckily these analysts, who were anticipating another surge towards the USD130-140 per barrel range this summer 2022 were wrong, but prices around 80-90 USD are most probable. The investments to secure the energy supply will keep the demand and prices for tube products high (Figure 16).

In addition to exploration activities, the need to build new pipeline routes has also increased since the ban on Russian pipelines to Europe. In the wake of the attacks on the Northstream pipelines, which released very large quantities of methane as an environmental desaster, it can be expected that the standards for pipelines will become even more demanding. This development offers the manufacturers of large-diameter pipes > 406 mm OD opportunities for interesting business.

The global construction market with about 5% of the global tube market presents another opportunity for pipe manufacturers with growth potential. A recent study published by Global Construction Perspective and Oxford Economics, entitled "Global Construction 2030", forecasts an 85% growth in global construction output to 15.5 trillion by 2030, with three countries, China, USA and India, leading the way and accounting for 57% of global growth alone. Europe, on the other hand, will reduce its pace of investment. There is room for additional production capacity for structural tubes, especially in India, to follow the market trend. The tube industry needs to further promote the benefits of tube applications and showcase the architectural perspectives (Figure 17). Tubular profiles are an ideal choice when visible structures

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are desired due to their varied shapes and closed cross-sections combined with smooth sides. Best mechanical properties and the possibility to bridge large spans are further highlights of tube profiles.

The automotive market representing about 15% of the global tube market is a quite steady and reliable market. After the set back of the world car production in2020, and the supply chain challenges in 2021, the market will continue to grow at a rate of 2 %/year (Figure 18) with many interesting tube and pipe applications.

The production level in 2020, which fell due to the Corona crisis, could only be increased slightly to around 77.2 million light vehicles worldwide in 2021 due to various challenges in the supply chain. According to IHS, the recovery process will take longer in the volume markets of Europe and North America. Future growth will take place primarily in Asia, especially in China. However, China could increasingly become a sales problem for the western automotive industry due to the American decoupling tendencies.

However, the tendency to further reduce the weight of vehicles supports the trend towards the use of tubular products. The greatest potential for the use of tubular products (Figure 19) is seen in vehicle frames, followed by chassis and powertrains. Tube manufacturers need to enter new vehicle series with larger volumes to further expand their presence in the light vehicle industry.

The mechanical engineering market segment, which accounts for around 9% of world pipe production, has developed well in line with global GDP in recent years (Figure 20). During the financial- and corona crisis, the market was characterised by higher volatility with sharper declines and quick recoveries. In 2022, the current further recovery is slowed down by geopolitical circumstances. Asia, and China in particular, is the largest market for machinery purchases. Here, therefore, the decoupling intentions of the USA must be observed since these could become a game

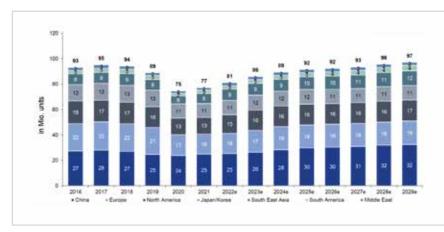


Figure 18: Light Vehicles production with improves expectations, Source: IHS 08/2022

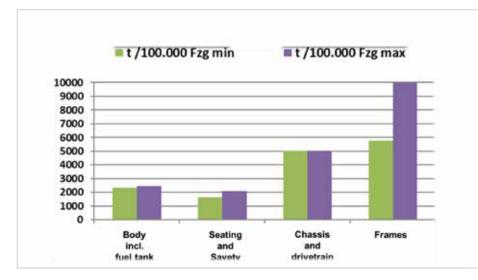


Figure 19: Focal points of potential pipe volumes in the vehicle sectors, Source: HIS

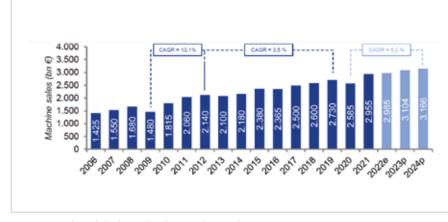


Figure 20: The Global Market for Mechanical Engineering continues to grow Source: VDMA, IKB Research

changer for the worldwide mechanical engineering industry. The USA and Europe continue to be significant sales regions as well. It remains noteworthy that the Chinese industry has taken the global lead in machinery sales since the Corona crisis. This market segment certainly has the greatest variety of tube products. Cylinder, ball bearing- and turned part tubes, to name just a few prominent representatives of this market segment, certainly show good prospects for tube producers.

Most pipe and steel producers were able to report strongly improved economic figures for Q1 and Q2 in 2022 in the wake of the price increases. However, for European pipe producers, the additional CO¬¬2 costs agreed to be imposed by the European Community represent a major challenge. Confidence in being able to compete on the world market in the future with these additional costs is dwindling among some tube producers.

In general, there is enough production capacity to serve even the increased demand for tubes and pipes for all market segments. Raw material prices for the steel as well as the tube and pipe industry would seem to have peaked by the end of 2021.

Energy costs, however, remain high and climb even further since market interventions (e.g. OPEC plus) and warlike actions call free world trade into question. Further challenge may be imposed, if political measures to prevent climate change are not introduced in a balanced way, with possible consequences being the migration of high energy consuming industries to lower-cost regions. Nonetheless, if the balance of supply and demand within the tubes and pipes industry can be restored, price volatility can be expected to calm down. How long will it take, to realize the inflation target of 2% again? Tube plant infrastructure with respect to tube mills and finishing lines as well as applied quality assurance systems also plays a significant role. Tube and pipe producers who have used the corona pandemic to improve their productivity, flexibility and customer service, like introducing "Industry 4.0" measures, will benefit from such measures.

With an eye to the return to something like normal, it should be noted that plant builders and technology suppliers alike may find interesting business opportunities in this new market segment. Some technology suppliers have already reacted and enhanced their product portfolio with the addition of digital solutions.

It is good to realize, that besides the virtual exchange in our industry, such as the webinars organized by the International Tube Association (ITA) now again hybrid or even personal events for industrial exchange take place. The recent conference alongside Tube India 2022 this November under the headline "Emerging Technology and Innovations in Pipe Tube Industry" was an excellent example hereto. It was great to meet tube producers as well as suppliers to the tube and pipe industry at our world largest tube and pipe show "Tube Düsseldorf 2022" and the regional show "Tube India 2022" in Mumbai.

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# Thinking big, without compromising on precision

Miba Automation Systems occupies a special place within the Miba group of companies: The business is dedicated to special-purpose machine construction. Based in Upper Austria, Miba Automation Systems is a global player, in particular in the field of sustainable wind energy. For preparing the welding seams of offshore wind tower foundations, Miba Automation Systems relies on Boehlerit technology, with milling tools that guarantee maximum precision and tool life as well as top-level performance.

The roots of Miba Automation Systems go back to 1927 and the company first branched out into machine construction in the 1950s. At first, machines were built for in-house applications, in particular the manufacturing of slide bearings. In the 1980s, this field began to generate global interest, and the Upper Austrian business established itself as world market leader for machines in this segment. But that is just one aspect of its colourful history: Today, 70 employees at the Aurachkirchen site manufacture special-purpose CNC machines for a wide range of industrial applications. Among the highlights are

machines for e-mobility, used all over the world to produce stators for electric cars. Managing Director Ing. Klaus Weberndorfer, MBA: "Our core competence is the mobile and stationary machining of large workpieces." Today, mobile and stationary machine tools by Miba Automation Systems are used primarily in the wind energy sector, in particular the manufacturing of offshore wind tower foundations. These foundations are fully immersed in water and consist of steel-tubular posts with diameters of up to 14 metres. To withstand the immense loads, the posts have to be rammed into the seabed to a depth of 50 metres and more. Due to their enormous dimensions, the posts consist of individual steel rings, which means that essential steps in the construction process must be completed on site, for instance the preparation of the welding seams and the welding process itself. "We have to take the machine to the component", is how Klaus Weberndorfer sums it up. The same applies to the production of steam turbines for thermal power plants and the turbine casings used in hydropower plants, where components are also too large to be transported.



Miba Automation Systems



High-precision welding seams made with maximum performance: Boehlerit milling tools are used to prepare welding seams on mobile and stationary machines by Miba Automation Systems.

#### Perfect preparation of the welding seam

The solution for milling the huge wind tower foundations lies in using mobile machines for circumferential seams, and stationary machines for longitudinal seams. If you think that, with these sorts of dimensions, precision is probably not such a big deal, you're wrong! "Our customers set great store by the flawless preparation of welding seams", Klaus Weberndorfer explains. The individual tubular segments must be welded both longitudinally and circumferentially - a challenge, not least due to wall thicknesses of up to 150 mm. The Upper Austrian business has turned this niche into a success story. With its special machines for the milling of longitudinal

and circumferential seams, Miba Automation Systems has established itself as market leader in recent years. The mobile machines are designed in such a way that they may be moved along the components by a forklift or on rails. Where the tubular segments meet, a tulip-shaped structure is milled into the future welding seam, which provides the seams with optimal stability despite the enormous loads they will be exposed to. At the same time, material usage during welding is minimised and the process is speeded up. Klaus Weberndorfer: "Usage of the welding material is a major cost driver, and we are able to offer our customers a highly economical solution."

#### High performance, long tool life

The right milling tool is an essential element in this solution. Miba Automation Systems relies on the milling technology developed by Boehlerit, cutting and material specialist from Kapfenberg, Styria, and delivers its machines to customers all over the world with special Boehlerit milling tools. This is also due to the tool life of the milling tools, which frequently have to handle diameters from 950 to 1,100 mm. Remember: The diameter of these tubes is up to 14 m, with a material thickness of up to 150 mm. For the optimal preparation of the welding seam, it must be milled in several stages, down to a depth of up to two thirds of the material thickness. The lengths to be machined are therefore enormous - but constantly changing the tools would impact productivity, and ultimately also cost-effectiveness. Boehlerit offers distinct advantages in this context. Klaus Weberndorfer: "The indexable inserts are specially designed for the required geometries and offer maximum performance and tool life, even with materials that are difficult to machine." In addition, high speeds

#### **Global corporation from Upper Austria**

Miba AG develops and manufactures function-critical components along the entire energy value-creation chain. Its products are primarily used in the efficient and sustainable generation, transmission, storage and usage of energy. Miba sintered components, engine and industrial slide bearings, friction linings, power

electronic components, special-purpose machines and coatings may be found in vehicles, trains, ships, aircrafts, power plants, refineries, compressor and industrial pumps worldwide. The family-run company headquartered in Laakirchen (Upper Austria) employs 7,500 people at 31 locations worldwide.

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are possible, an important factor for the customers of Miba Automation Systems. After all, even slight accelerations have a massive influence on the duration of the overall process, given the huge machining lengths. Boehlerit ticks all these boxes!

The perfect system

In addition, Boehlerit offers its customers practical support with applications, which doesn't end with cutting depths or speeds. Miba Automation Systems also benefits from this. At the moment, the company is for instance experimenting with milling tools for duplex steels, explains Weberndorfer. And there is another aspect that he insists on mentioning: "Ever since we started fitting our machines with Boehlerit milling tools, there hasn't been a single complaint." Not surprising, considering the expertise that Boehlerit brings to the table. To put it differently: Boehlerit is

not content with standard solutions: This Kapfenberg-based business always strives for solutions that offer added value. Boehlerit certainly has the tools for an exciting future.

www.miba.com www.boehlerit.com

Text: Ing. Martin Gold, Vienna-based journalist, author and photographer

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Tecnar Automation Ltée

# Lut 2.0 - the new standard for online wall thickness gauging of hot seamless tubes and pipes



Tecnar continues to push the boundaries of innovation with sale of two Lut 2.0 online wall thickness gauges in China. The Canadian developer and manufacturer of advanced sensors for industrial process monitoring and control recently sold a Lut 2.0 SPS (Single Probe Scanner) to the Baotou Steel Seamless Pipe Company for its Multi-stands Plug Mill (MPM) continuous rolling mill and a Lut 2.0 DPS (Dual Probe Scanner) to the **Daye Special Steel Company for its Assel** mill. These purchases give both companies the state-of-the-art tools to better monitor and understand their seamless manufacturing process and improve productivity.

The Lut 2.0 is the latest version of Tecnar's non-contact ultrasonic thickness gauge designed for the online measurement of hot seamless steel tube and pipe. The Lut 2.0's laser-ultrasonic technology can be used anywhere on the production line, from piercing up-front to sizing at the end of the hot manufacturing process, with or without a mandrel, with light to heavy bouncing. And the Lut 2.0 is perfectly suited for an MPM or Assel mill: There's no need to wait until the mandrel is removed to measure the wall thickness profile of the tube or pipe.

The Lut 2.0 provides the most accurate wall thickness and eccentricity measurements in the industry. As the Lut 2.0 rapidly scans the circumference of the tube and pipe, radial wall thickness profiles are displayed with unparalleled detail. These details give the operator a real-time view of the impact of roller settings in multiple-stand mills, such as an MPM.

The Lut 2.0, based on Tecnar's decades of expertise in steel and seamless pipe and tube mills, is the next generation of non-contact online ultrasonic wall thickness gauges. The system is more robust and reliable than ever for plant operation with new proprietary products such as the Marathon, a maintenance-free diode-pump laser and the Durabeam, a sealed optical system specifically designed for a harsh, dirty environment. All of this makes the Lut 2.0 the new standard for online wall thickness gauging of hot seamless tubes and pipes. And since it's the only system that's free from harmful radiation, it's also the safest in the industry.

#### **About Tecnar**

Based in St. Bruno, Quebec, Canada, Tecnar designs, develops, manufactures and markets novel systems and sensors for industrial process monitoring and control. Founded in 1989, Tecnar has used its expertise to bring cutting-edge technology to the plant

floor. Over the past decades, Tecnar has diversified into four highly specialized divisions: Automated pipe and vessel welding, thermal and cold spray in-situ monitoring, continuous steel galvanizing pot chemistry analysis, and non-contact ultrasonic gauging for the seamless tube industry.

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SMS group GmbH

# LOTTE ALUMINIUM places order with SMS group for high-bay storage system for aluminium coils

- 500 coil storage spaces for smooth material logistics
- Direct access to various process lines in the plant
- Cantilever racking system ensures the material-friendly storage of a vast range of different-size materials
- Optimized process flow thanks to digitalization

As part of its strategic expansion plans, LOTTE ALUMINIUM Materials USA LLC is investing in a new production plant for aluminium cathode foils in the US state of Kentucky. A core section of the overall plant is the logistics and storage system, which is where LOTTE relies on the innovative strength and expertise of AMOVA, a subsidiary of SMS group. SMS was contracted to supply a smart, fully automated high-bay store with transport system. The high-bay storage system, which has around 500 storage spaces, is connected to the various process lines by the relevant conveying equipment and will be provided with

warehouse management software specially developed by SMS.

The LOTTE group is one of the largest conglomerates in South Korea and employs more than 80,000 people in over 90 business units worldwide. The group's highly diversified product portfolio includes aluminium foils, printed packaging materials, corrugated cardboard boxes, as well as basic chemicals and highly advanced materials such as polymers, monomers, and petrochemical feedstocks.

The group's target is to produce 36,000 tons of cathode foils annually to meet the sharp increase in demand. Aluminium cathode foils are used, for example, in the production of lithium-ion batteries for electric cars. The new high-bay storage system will accommodate coils on paper and steel spools as well as separator racks.

As LOTTE produces very thin-rolled, sensitive coils, SMS was faced in the project



From left to right: Changhyun Park, CTO, LOTTE ALUMINIUM, USA; Eunseong Chang, CEO, LOTTE ALUMINIUM, USA; Bernd Klein, CEO, AMOVA; Daniel Opitz, Commercial Project Manager, AMOVA).

planning phase with the challenge of developing a system that was as flexible and material-friendly as possible. An important aspect for LOTTE when awarding the contract was that SMS has a successful reference facility, a fully automated, intelligently controlled high-bay storage system, in the US state of Kentucky, one of many references all over the world.

Applying its decades of experience, SMS worked with the customer to develop an ideal solution tailored to his needs. With the cantilever system (load-carrying beam supported at one end) that is now being implemented, all products can be supplied damage-free for the next stage in the process.

LOTTE is relying on SMS's digitalization expertise and rounding off its portfolio with the warehouse management software. This software, specially developed over decades, is a core component of the high-bay storage systems and is subject to continual optimization to ensure end-to-end material tracking and user-friendly visualization.

The system is scheduled to go into service at the end of 2024.

#### SMS group GmbH

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SMS group GmbH

# SMS group and Tata Steel sign MoU to decarbonize integrated steel plants

Tata Steel, one of the world's leading steel producers, has signed a memorandum of understanding with SMS group to reduce carbon emissions at Tata's integrated steel plants across India. SMS group will contribute its leading technological expertise in designing, supplying and commissioning plants with significantly lower CO2 emissions.

Burkhard Dahmen, CEO and Chairman of SMS group, said: "Our companies have a common goal to reduce carbon emissions from iron and steel production, as the industry is not only key to economic prosperity, it is also one of the largest CO2 emitters. We are therefore very proud to team up with Tata Steel and are committed to supporting the company with its decarbonization roadmap. This represents an important contribution in the fight against climate change and is beneficial for the Indian economy as a whole and especially for the communities located around the steel plants."

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The MOU was signed by Burkhard Dahmen, CEO and Chairman of the Managing Board, SMS group, and by T. V. Narendran, CEO and Managing Director of Tata Steel



Signing ceremony at Tata Steel, on November 23, 2022

The MoU with Tata Steel is another milestone in SMS group's mission to turn metals green. SMS can draw on its unique positioning as an expert in all major metals, as a supplier of the complete process chain, including all upstream and downstream processes plus recycling, and as a

provider of services covering automation, digitalization, and consulting. With more than 150 years of experience, SMS offers all the products and services needed to forge a greener metals industry (#turningmetalsgreen).

SMS group GmbH

# SMS group installs its first Al-based Integrated Operating Center at Daye Special Steel

- Centralized operator monitoring of the entire 460 millimeter tube plant using Al video analytics
- Only six operators are required to supervise the entire rolling line

SMS group has completed its first X-Pact® IOC (Integrated Operating Center), a central monitoring room for the entire 460-millimeter tube plant, at Daye Special Steel in Hubei Province, China. With the Daye 460 project, which also includes the enhancement of the tube plant's existing automation systems, SMS group has achieved a breakthrough in its Integrated Operating Center (IOC) application, an important milestone on the path to X-Pact® Lights-out.

Cameras installed along the production line provide the basis for centralized operator monitoring, thus eliminating the need for operating activities in the harsh environmental conditions commonly found in the metallurgical industry. The automation system utilizes Al video analytics to respond to abnormal situations during production. The line's level of automation has been improved and a breakthrough in intelligent manufacturing with centralized remote control has been achieved with the help of Al technology. Consequently, Daye is able to optimize its tube mill production processes from one control station.

With the demand for smart factories increasing worldwide, the Integrated Operating



Al-based X-Pact® Vision Integrated Operating Center at Daye Special Steel

Center has taken on a key role. An entire plant, from ironmaking to finished product, can be integrated into a central operating center, not only for greenfield factories, but for existing complexes too. The IOC represents the pinnacle of excellence of the production complex, facilitating plant and logistics management by concentrating information and thereby significantly reducing the required manpower.

Following implementation of the Integrated Operating Center, the 460-millimeter tube

plant at Daye Special Steel can be operated with the highest possible degree of automation. The number of discrete control elements across the entire rolling line has been reduced from 550 to only 50. Today, only six operators manage the entire rolling line, instead of 15 previously.

The new IOC and the introduction of autonomous operation play an important part in improving both product yield and quality. for the communities located around the steel plants."

Bültmann GmbH

# Next step towards the "intelligent drawing machine"

#### Bültmann GmbH

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Another feature from the field of applied Industry 4.0 in drawing machines was recently successfully integrated into several BÜLTMANN drawing machines.

The vibration measurement, which is able to detect a "chatter" or vibrations individually at each drawing track of a drawing machine, is available both integrated in new plants and as a retrofit kit for used Bültmann drawing machines.

The intelligent control of the vibration measurement enables speed control of the drawing

process while avoiding vibrations. The quality of the drawn tubes is 100% ensured with a simultaneous increase in output.

A real application example demonstrates a 60% increase in production with a simultaneous reduction in scrap towards zero.

In combination with the already known Industry 4.0 features, this is a further step towards an operator-independent, process-safe and performance-oriented drawing machine.

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The monitoring system, which is based on proven sensor technology with evaluation, was developed for this application together with our very capable partner Qass GmbH in Wetter, Germany and can also be tailored for various other potential applications.

We will be happy to provide further information on the possibilities of the system; please contact us.



Fives Group

# Fives provides integrated solutions to maximize productivity



Nucor Corporation, North America's largest steelmaker, chose Fives, an industrial engineering group, for a completely new packaging system and a cut-off for at their Nucor Tubular Product facility, located in Marseilles, USA.

#### **Packaging System**

Nucor Marseilles was looking to maximize the productivity and reliability of their mill while also increasing the safety of operators by moving away from manual packaging and strapping techniques. Fives will provide Nucor Marseilles with a new Taylor-Wilson packaging system from the run-out all the way to the distribution of the bundles. This new packaging system will be capable of packaging tubes from 18' to 80' long with wall thickness up to 5/8" and mother tubes up to 12 3/4".

Fives partnered up with ITIPACK to provide the best solution for Nucor Marseilles. ITIPACK will supply an automatic strapping mechanism while Fives provides the handling and bundling solutions. These automated systems will increase safety of operators by Cut-off from Fives

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removing the need to handle tube by hand and will maximize the overall productivity and reliability of the mill exit.

"Our proven technical expertise and finishing solutions gave Fives the upper hand in this project. The long-standing relationship between Fives and Nucor was an added benefit, as Nucor already has trust in our solutions," says Ricardo Sierra, Vice President of Sales & Marketing at Fives Bronx, Inc., a subsidiary of Fives, which specializes in mill and finishing equipment. "This technical expertise and our hands-on support will continue to be what makes Fives the best partner," he adds.

#### **Cut-off for 12K Abbey mill**

Following the success of the new packaging system order, Nucor Marseilles also chose Fives to put in a new cut-off for their 12K Abbey mill, which was originally installed for structural applications.

This new cut-off will be a multi-mode cut-off machine which allows for improved quality cuts while maximizing the cutting speeds. With the packaging system and cut-off being installed by Fives on the same mill, this

became a great opportunity to implement them together and create an integrated solution.

Fives will also be upgrading the Transition Beam System (TBS) on the 12K Abbey mill at Nucor Marseilles to support their current market requirements of 0.630" max thickness for HSS tubing. TBS is an optimized forming system capable of improving the forming process for a large range of tube sizes while also minimizing tooling costs and reducing changeover times.

Fives is looking forward to working with Nucor Marseilles on these various projects, as well as working with Nucor's greenfield sheet mill in West Virginia, USA, to install two new galvanizing lines which will be operational in 2024

#### Fives - Steel & Glass Division

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SIKORA AG

# SIKORA presents the new X-RAY 6000 PURE for single-layer measurement of hoses and tubes



# Quality control in extrusion lines with X-ray technology

For over 20 years, SIKORA has been internationally known for its reliable and safe X-ray measuring systems. For single-layer applications, SIKORA has developed the X-RAY 6000 PURE. The new X-RAY 6070 PURE and X-RAY 6120 PURE models are available on the market, for measuring tubes and hoses from 6 to 65 mm and 10 to 110 mm, respectively.

In addition to single-layer tubes and hoses, the total wall thickness of many multi-layer products can also be measured. In combination with the ECOCONTROL PURE, a processor system with a high-resolution 15" touchscreen display, the measured values are clearly displayed for further analysis.

The X-RAY 6000 PURE is a cost-effective. safe and powerful alternative to conventional measuring technologies. The system allows to constantly monitor the wall thickness and to reduce it to the minimum tolerance value. Safety margins can be successively reduced and the automatic control keeps the dimensions within the specification. The assurance of quality in combination with material savings leads to a significant increase in your productivity. For measuring up to three layers, SIKORA also offers the X-RAY 6000 PRO.

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Messe Düsseldorf

# Messe Düsseldorf expands metal trade fair portfolio to include Egypt

Messe Düsseldorf extends its metal trade fair portfolio with an investment deal in Cairo (Egypt) in 2023.

As a special area of METAL & STEEL EGYPT from 2 to 4 September 2023, the four trade fairs GIFA Middle East Africa, METEC Middle East Africa, wire Middle East Africa and Tube Middle East Africa will be held at the Egypt International Exhibition Center for the first time.

METAL & STEEL EGYPT, organised by AGEX (Arabian German Exhibitions & Publishing Ltd), has presented a wide range of machinery, equipment and products from the steel and metal industries for the Near and Middle Fast since 2010.

"We are very much looking forward to the partnership with AGEX and are confident that our metal trade fair quartet offers profitable synergies for all parties involved," Daniel Ryfisch and Malte Seifert, Directors of the wire, Tube, GIFA and METEC trade fairs at the Düsseldorf, Germany location, are pleased to say.

The leading Egyptian organiser AGEX has been successfully staging trade fairs and conferences in the region since 2004 and is renowned for its special expertise in the industrial sector. With this cooperation, this organiser and Messe Düsseldorf are combining their expertise.

Registrations for wire MEA and Tube MEA are accepted by Cem Bagci and Patrick Hayek at bagcic@messe-duesseldorf.de and HayekP@messe-duesseldorf.de and for GIFA MEA and METEC MEA by Sarah Möller at moellers@messe-duesseldorf.de.

More information as well as the registration documents will be available starting in January 2023 at: www.wire-mea.com, www. tube-mea.com, www.gifa-mea.com and www.metec-mea.com.

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#### **Review**

Tube 2022

# Worldwide energy transition determines investment climate for leading trade fairs for wire, cable, tubes and pipes in Düsseldorf



20-24 June 2022 Düsseldorf

wire and Tube 2022 – sustainability a much-debated topic in the exhibition halls

Economically challenging times and geopolitical crises on the one hand, and the longing for personal encounters and expert conversations, on the other – against the backdrop of this global climate the world's leading trade fairs for the wire, cable and tube and pipe industries, wire and Tube, have closed their doors after five successful trade fair days in Düsseldorf.

1,822 exhibitors from over 50 countries came to Düsseldorf from 20 to 24 June 2022 to present technology highlights from their industries on 93,000 square metres of exhibition space.

"Düsseldorf is and will remain the place to be for these weighty industries. Especially in times of sustainable change it is more important than ever to be represented here in Düsseldorf and in direct exchange with the players in these industries," stressed Bernd Jablonowski, Executive Director at Messe Düsseldorf, and went on to say: "Düsseldorf has paid off again – was the feedback from the well-attended exhibition halls. Most companies plan to return again in 2024."

"In-depth conversations about the current challenges associated with the global energy transition, new requirements made on machines and equipment – and all of this considering sustainability aspects – the need for discussion among exhibitors and visitors in the exhibition halls was enormous," confirmed Daniel Ryfisch, Project Director of wire/Tube and Flow Technologies commenting on the successful re-start of the trade fairs.

Alongside many machines and plant facilities in action there were impressive trade fair launches to be seen in the exhibition halls: the wire exhibitors in the Fastener and Spring

Making Technology segments also presented finished products such as fastener components and industrial springs – an absolute novelty. Technical conferences, expert meetings and guided ecoMetals Tours of the exhibition halls enhanced the exhibitors' ranges of the two trade fairs in 2022.

This was the first time for the players in the wire, cable, pipe and tube industries to join Messe Düsseldorf's ecoMetals Campaign. A transformation of these energy-intensive industries towards more sustainability has already been actively supported by Messe Düsseldorf for years now. Because the ecoMetal-trails demonstrated live that the exhibitors at wire and Tube are not only innovative but are also increasingly producing in an energy-efficient and resource-saving way.

Opportunities for, and avenues towards a green transformation were discussed at the wire and Tube Expert Meeting in Hall 3 over two days. Here such key industry players as Salzgitter AG, thyssenkrupp Steel, thyssenkrupp Material Services Processing, ArcelorMittal, Heine + Beisswenger Gruppe, Klöckner + Co SE, Swiss Steel Group, SMS Group GmbH, Wirtschaftsvereinigung Stahlrohre e.V., Voß Edelstahlhandel GmbH + Co. KG and Stahlmarkt Consult shared their roadmaps for Green Transformation. They reported of exciting transformation processes in their companies.

wire 2022 presented 1,057 exhibitors from 51 countries on some 53,000 square metres of net exhibition space showcasing wire making and wire processing machines, wire, cable, wire products and manufacturing technology, fasteners and spring making technology including finished products and grid-welding machinery. In addition to this, innovations from the measuring, control technology and test engineering were on display.





#### Review

"We were all looking forward to wire, we have missed the personal contact in recent years and have learned to appreciate the value of direct customer talks at trade fair events such as wire and Tube," says Dr.-Ing. Uwe-Peter Weigmann, Spokesman of the Board at WAFIOS AG, in an initial statement. "We have deliberately chosen our trade fair motto 'Future Forming Technology' and thematically found the sweet spot for productivity leaps, ground-breaking new technologies and automation solutions that will enable even more sustainable business in the future. For WAFIOS, innovations have always been in the forefront and we have once again clearly underlined this with our trade fair programme. Customer response was excellent and our stands, both at wire and Tube, were very well attended on all days of the trade fair," said Dr. Weigmann, giving a positive summary of the event.

On over 40,000 square metres of net exhibition space with 765 exhibitors from 44 countries the international tube and pipe trade fair Tube showcased the complete bandwidth from tube manufacturing and finishing to pipe and tube accessories, tube trading, forming technology and machinery and plant facilities. Process technology tools, auxiliaries and measuring and control technology as well as test engineering also rounded off the ranges here.

The importance of individual, highly specialised requirements for tubes in industries as diverse as oil and gas, heavy and waste water, food and chemicals was demonstrated by Salzgitter AG, which placed its product Mannesmann at the heart of its presence at Tube 2022.

"Mannesmann is synonymous worldwide with steel tubes of the highest quality," said Frank Seinsche, Head of Corporate Design & Events Group Communications at Salzgitter AG and responsible for trade fair appearances. "In addition to presenting our products, Tube 2022 is a perfect communication platform for us to liaise with customers and partners," the trade fair expert was pleased to say. "Moreover, with Mannesmann H2 Ready we are already presenting solutions for the hydrogen transport and storage sector," added Seinsche.

With strong contingents at wire and Tube were exhibitors from Italy, Turkey, Spain,

Belgium, France, Austria, the Netherlands, Switzerland, Great Britain, Sweden, Poland, the Czech Republic and Germany. From overseas, companies from the USA, Canada, South Korea, Taiwan, India and Japan travelled to Düsseldorf.

All these industry players received excellent ratings from the international trade visitors who travelled to Düsseldorf from more than 140 countries. At around 70%, the proportion of international trade fair visitors was once again very high.

Around 75% of trade fair visitors were executives with decision-making powers. Overall, the willingness of the industries to invest, especially in challenging times, was high. There was also an increase in first-time visitors, a clear sign that wire and Tube fully reflect the international market with their offerings and thus meet the expectations of the industries. 70% of the visitors surveyed said they would come to Düsseldorf again in 2024.

wire visitors were primarily wire and cable manufacturers and came from the iron, steel and non-ferrous metal industry or from the vehicle and upstream supplier industry. They were interested in wire and wire products, machinery and equipment for the production and processing of rods, wire and strip as well as test engineering, sensor technology and quality assurance for the wire and cable industry.

In addition to tubes, tube products and accessories for the tube trade, visitors from the tube industry were interested in machinery and equipment for the production and processing of metallic tubes, in tools and auxiliaries for the production and processing of metal tubes and in testing technology, sensor technology and quality assurance for the tube industry.

2024 will see wire and Tube held concurrently again from 15 to 19 April at Düsseldorf Exhibition Centre.

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#### Review

Tube Southeast Asia 2022

# Successful trade fair appearance for wire, Tube, GIFA and METEC Southeast Asia at location Bangkok



From 5 to 7 October 2022 the leading regional trade fairs for the wire, cable and tube & pipe sectors, wire and Tube Southeast Asia, presented their latest technologies concurrently with the foundry and metallurgy trade fairs, GIFA Southeast Asia and METEC Southeast Asia, at BITEC in Bangkok.

the wire, cable, tube and pipe, automotive, oil, gas, construction, energy and electrical industries.

The visitors of both trade fairs are produc-

ers, upstream suppliers to and buyers from

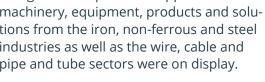
#### 5 - 7 Oct 2022 **Bangkok**



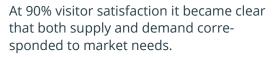
#### Owing to the extended ranges the trade fairs at the Bangkok location have strengthened their expertise as leading regional information and trading platforms. A total of 244 exhibitors from 32 countries travelled to Bangkok to demonstrate the innovative power in their key technologies. 85% of the exhibiting companies were of

Alongside the upstream supplier industries machinery, equipment, products and solutions from the iron, non-ferrous and steel industries as well as the wire, cable and pipe and tube sectors were on display.

international origin.

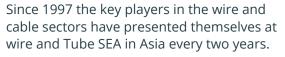








#### wire and Tube Southeast Asia



On display here are machines and equipment for wire making, processing and wire finishing, accessories, measuring, control and test engineering as well as new and further developed special wires and cables. Machinery and technologies from the segments tube and pipe production, processing and finishing supplemented the ranges at Tube SEA.



#### First appearance for GIFA and METEC Southeast Asia in 2022

For the first time, companies from the foundry and metallurgical sectors of industry showcased their technologies concurrently at GIFA Southeast Asia and METEC Southeast Asia - thereby completing the value chain of the manufacturing, metal-working and finishing industry. The background to extending the industrial trade fairs in Asia was the rising demand for machinery, equipment and products for Southeast Asia's growing infrastructure.

In view of the booming projects in the construction sector, the growing demand for products from iron and steel production and the rising demand for logistics and transport services the extension from two to four thematically interlocking trade fairs has proven to be a win-win for all parties involved.

As early as next year the trade fair quartet will again be hosted in Bangkok - this time from 20 to 22 September 2023.

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# Successful staging of metal trade fair quartet in India

wire India, Tube India, METEC India and **India Essen Welding & Cutting again** prove innovation drivers for their industries in Mumbai

From 23 to 25 November 2022 the Bombay Convention & Exhibition Center in Mumbai again served as the meeting point for the leading regional trade fairs of the wire, cable and pipe & tube industries as well as the metallurgical, welding and cutting sectors.

Four trade fairs with a total of 400 exhibitors from 21 countries presented current technologies, machinery, finished products, and solutions for their respective industry sectors over three trade fair days.

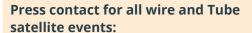
In addition to Indian companies, most European exhibitors came from the Benelux countries, Austria, Switzerland, Germany, Italy, the United Kingdom, Scandinavia, Turkey, France and Spain.

Overseas companies travelled from the USA, Canada, Thailand, Vietnam, Taiwan, South Korea, Singapore, South Africa and China to India. In addition, the trade fairs featured national joint participations from Switzerland, Italy and Germany. The exhibits were complemented by a comprehensive conference programme.

The metal trade fair summit was again organised by Messe Düsseldorf India in cooperation with its international partner associations IWCEA (International Wire and Cable Exhibitors Association), IWMA (International Wire & Machinery Association), ACIMAF (Italian Wire Machinery Manufacturers Association), WCISA (Wire and Cable Industry Suppliers Association) and ITA (International Tube Association).

The Indian industry associations SWMAI (Steel Wire Manufacturers Association of India), AIWMA (All India Weldmesh Manufacturer`s Assocoation), INSDAG (Institute for Steel Development & Growth) and SSPC India (The Society for Surface Protective Coatings - India) supported their trade fairs again.

In 2024, the trade fair quartet will again be held at the Bombay Convention & Exhibition Center, this time from 27 to 29 November. www.wire-india.com, www.Tube-india. com, www.metec-india.com, www.iewc.in



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### **Press contact for GMTN satellite**



23-25 Nov 2022 Mumbai



#### **Preview**





ITA Conference 2023

# Trend-setting technologies and strategies for tubes & pipes

#### **SAVE THE DATE**

The next ITA Conference is scheduled to take place on May 11th 2023 in Duesseldorf, Germany.

Some of the features we have planned:

- Market overviews of pipe and tube sectors
- Presentations by producers and equipment suppliers
- Latest technological developments
- Table top exhibits
- Excellent networking opportunities incl. networking event
- Reduced fees for early bookers, ITA members and students

#### **Call for Papers / Speakers**

Interested speakers are invited to submit an abstract (max. 300 words) describing the main ideas of their papers together with the presenter's CV (max. 200 words). Abstracts should not focus on company presentation but on technical/economic classifications, new technologies, modernization, R&D or recent case studies. Joint presentations between pipeline operators and technology providers are welcome.

#### Sponsorship packages

A key element of the ITA Conference 2023 is the support of sponsors, for which ITA is very grateful. This is also an opportunity for your company to increase awareness of its products and services. We provide a range

of different sponsorship packages. Each sponsor will be included, from the date of booking, in future marketing measures for the conference.

#### **Tabletop Exhibition**

Our tabletop exhibition will complement the conference sessions and provides the opportunity for one-to-one discussions with suppliers and producers during breaks and lunch. As all conference participants will have their coffee and lunch breaks directly within the exhibition area, this guarantees highly interested and influential potential customers "right in front of your door". (Member € 500,-/Non-member € 750,-)

For further information as well as for booking please contact cornelia.buesing@itatube.org.

More information will follow in January 2023. We look forward to seeing you at our ITA Conference in Duesseldorf!

#### International Tube Association e.V.

Cornelia Büsing Heinz-Ingenstau-Strasse 9 40474 Düsseldorf Germany

Tel.: +49 211 947-5650 Fax.: +49 211 947-3938

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#### **Preview**

**METEC 2023** 

# "Bright World of Metals" from 12 to 16 June 2023 in Düsseldorf



12 - 16 June 2023 Düsseldorf

Registration for exhibitors for the four trade fairs GIFA, METEC, THERMPROCESS and NEWCAST starts

The countdown is on – companies from all over the world can now register for the four trade fairs GIFA, METEC, THER-MPROCESS and NEWCAST. The leading international trade fairs with congress and high-calibre programme of side events for foundry technology, castings, metallurgy and thermo process technology will be held in Düsseldorf from 12 to 16 June 2023.

New technologies, rising demands made on energy efficiency and the desire for a careful handling of resources: the changes occurring along the entire value chain for industries do not stop short of the global foundry, metallurgy and thermo process technologies either. How can enterprises manufacture in a sustainable and efficient way? How can they connect their plants better, optimise production processes while maintaining their social responsibility at the same time? Which fundamental technological changes exist in the various branches of the metal industry? How do foundries and the metal-working industry remain attractive employers for professional talents compared to other sectors of industry? These and other questions will be discussed by sector experts at the most relevant international communication platform GMTN 2023.

"Our trade fair quartet is well known as the gateway to the world market. It is only here in Düsseldorf that decision-makers, experts, supplier to, and users in these industries can obtain a complete overview, exchange ideas and design trends for the markets of the future at not one but four trade fairs," explains Friedrich-Georg Kehrer, Global Portfolio Director at Messe Düsseldorf GmbH. "We all benefit from investment in new, green technologies; this is also reflected by our ecoMetals campaign, which has long been a model for success and has become an integral

part of the "Bright World of Metals". Eligible for participation in the campaign are all exhibitors who take such environmental aspects as resource savings, energy efficiency and climate neutrality particularly into account for their innovations. These topics especially appeal to trade visitors – which, of course, also holds true for the young talents so important to these industries. With our trade fairs we can therefore also make a certain contribution to fighting skilled labour shortage," says Friedrich-Georg Kehrer in view of the coming events.

Plants, products, forward-looking solutions and concepts revolving around foundries, iron, steel and non-ferrous metal industries, machinery suppliers, mechanical engineering or the automotive industry: every four years companies fly their flags at the trade fairs on site in Düsseldorf. From 17 January 2022 exhibitors will be able to register online for the four trade fairs under the following links:

GIFA - www.gifa.com

METEC - www.metec.com

**THERMPROCESS** – www.thermprocess.com

**NEWCAST** – www.newcast.com

# METEC - International Metallurgical Trade Fairs with ESTAD Congress

Forming an integral part of the trade fair quartet is METEC – for the eleventh time now. Equipment for iron, steel or non-ferrous metal production will be presented alongside lines for casting or forming steel, equipment and components for metallurgical plants and rolling mills or steel mills. With over 17,820 visitors (66% of international origin) and 618 exhibitors from 39 countries the latest METEC also posted record results.



The quartet of international trade fairs GIFA, METEC, THERMPROCESS and NEWCAST is accompanied by a programme of versatile side events comprising numerous seminars, international congresses, symposia and lecture series.

GMTN 2023 will be organised and held – on the basis of the current safety and hygiene provisions – by Messe Düsseldorf GmbH. The trade fairs are supported by VDMA (Association of German Mechanical and Plant Engineering). Also partnering with the quartet of trade fairs are the Foundry Chemistry Industry Association (IVG e.V., Laatzen), the Confederation of the German Foundry Industry (BDG e.V., Düsseldorf), the German Foundrymen's Association (VDG e.V., Düsseldorf) as well as The European Foundry Association (CAEF, Düsseldorf).

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### **Tube events**

Events for Business, Technology, Education and Networking

# Diary of world class tube events

January 20	23	
09 - 12	Steel Fab	steelfabme.com
April 2023		
17 - 22	BAU	bau-muenchen.com
Mai 2023		
01 - 04	OTC	otc-net.org
11 June 2022	ITA Conference	ita-tube.org
June 2023	CDE	and all and an are
06 14 - 16	SPE Tube China	spe-aberdeen.org tubechina.net
16 - 17		metec.com
September	2023	
11 - 14		fabtechexpo.com
		tubesoutheastasia.com
26 - 28 October 20		stainless-steel-world-event.com
	_	
02 - 05 November 2		adipec.com
		blachavna massa da
07 - 10 April 2024	Blechexpo	blechexpo-messe.de
	T 1	
15 - 19	Tube	tube.de
May 2024		
13 - 17	IFAT	ifat.de
June 2024		
	ACHEMA	achema.de
October 20	24	
22 - 25	Euroblech	www.euroblech.com
November	2024	
27 - 29	Tube India	tube-india.com
December	2024	

### News at the ITA technical committee

ITA has appointed Mr. Gerhard Kulessa as Chairman of their technical committee. He has decades of experience and expertise in the field of welded and seamless tubes and will be responsible for the organization of ITA-conferences.

ITA express their sincere thanks to Mr. Andy Houghton who served in this position for many years. He will remain member of the technical committee and support the team.



Gerhard Kulessa

+++ For members only: ITA offers the possibility to release all your information and pictures on the ITA website and social media at **365 days** a year – up to **20,000 visitors** monthly. +++

#### **ITA Inside**



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Henry Ford.

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Quarter page	€ 300.00	€ 285.00	€ 270.00
Double page	€ 1,500.00	€ 1,425.00	€ 1,350.00
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Inside back cover	€ 1,200.00	€ 1,150.00	€ 1,100.00
Front page	€ 2,000.00	€ 1,900.00	€ 1,800.00
Outside back cove	r€1,500.00	€ 1,450.00	€ 1,400.00

#### ITAtube Journal Rate Card - Non-Member

	IX	ZX	3X
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Quarter page	€ 600.00	€ 570.00	€ 540.00
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Inside back cover	€ 1,800.00	€ 1,710.00	€ 2,220.00
Front page	€ 4,000.00	€ 2,280.00	€ 3,600.00
Outside back cove	r€3,000.00	€ 1,900.00	€ 2,800.00

# **Imprint**

### Next Issue Deadline: 27. January 2023

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# Look at our next issue:

- Preview Tubotech 2022
- Preview Metec 2023
- Preview ITA Conference 2023
- Preview Tube China 2023





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