



Your Global Tube Platform
全球管材平台

Global Tube Market 6/2023

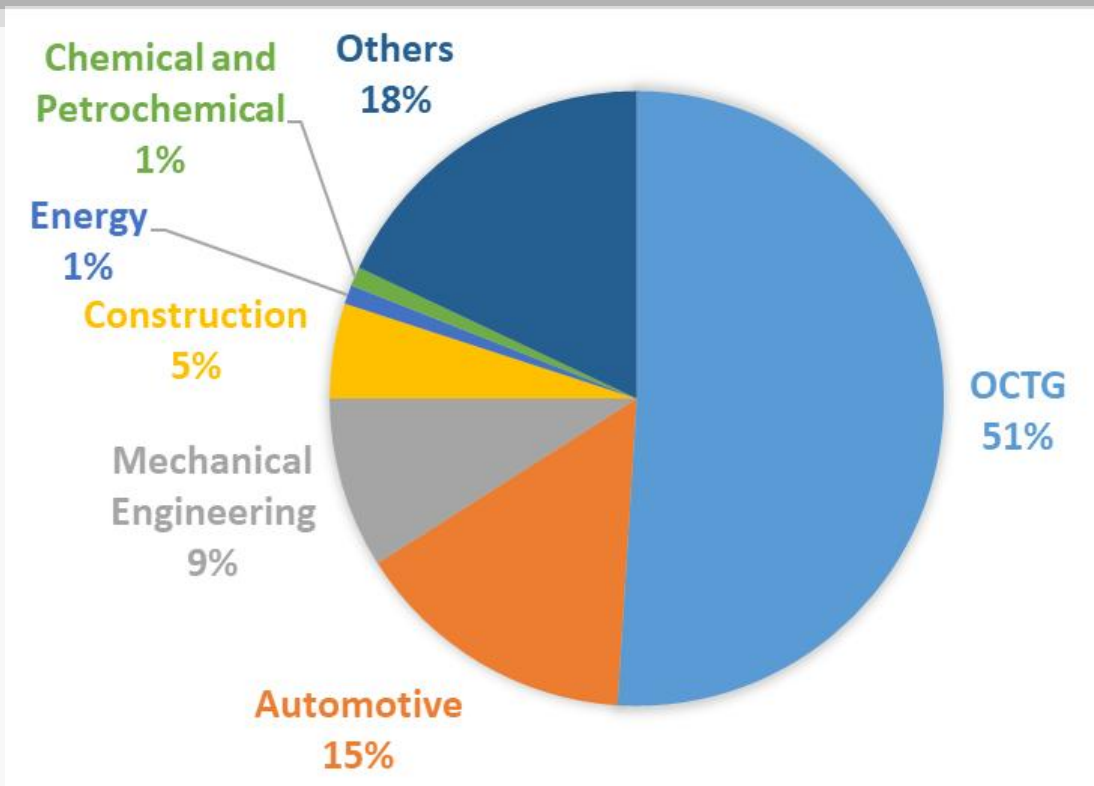
全球管材市场 2023年6月

Shanghai June 15th, 2023
2023年6月15日，上海



Tube Market Segments

管材市场细分

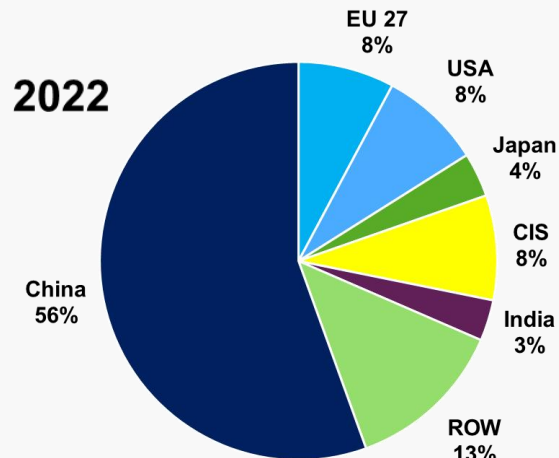
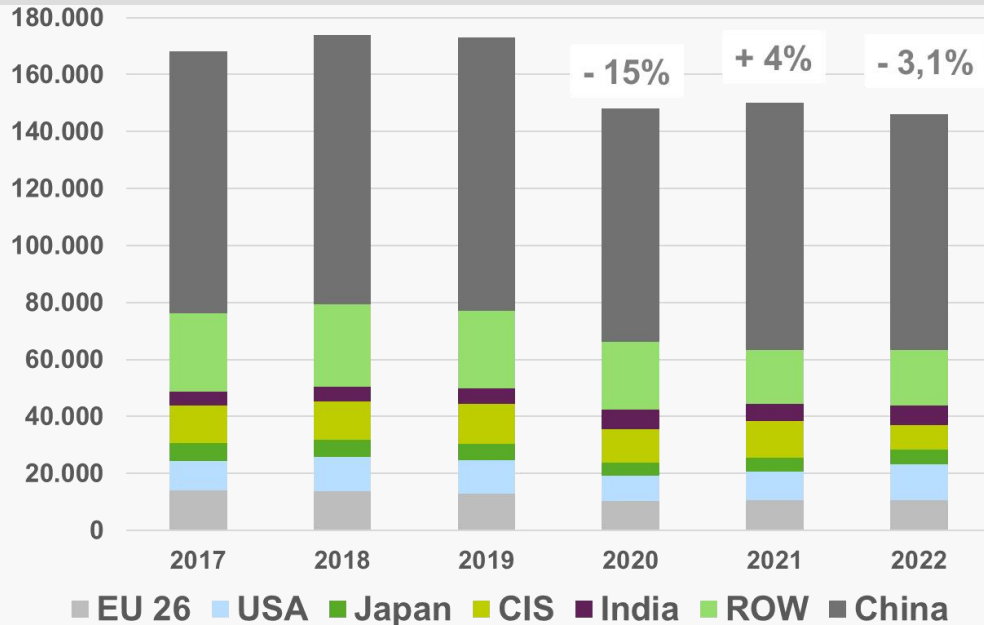


- OCTG:** strong, but volatile, due to oil price (tubing, casing, drilling) and pipeline projects.
 石油专用管材（**OCTG**）：表现强劲，但波动较大。主要原因在于油价（油管、套管、钻井）和管道项目的影响。
- Automotive:** strong, due to strong sales of cars (tubes < 90 mm OD) new potential for BEVs, BEVs will not apply SS-tubes for combustion engines.
 汽车：表现强劲。主要原因在于汽车销量强劲（使用< 90毫米外直径的管道），并且纯电汽车带来全新潜力，而原本适配于内燃机的SS管不适配于纯电汽车。
- Mechanical Engineering:** quite diversified due to its uncounted applications. - e.g., cold drawn hydraulic cylinder tubes.
 机械工程：因为应用较多，所以需求非常多样化。- 例如，冷拔液压缸管。
- Construction:** strong due to GDP growth and urbanisation – competition with steel profiles and concrete structures.
 建筑业：表现强劲，主要原因在于国内GDP增速和城市化进程不断加快——但会遭遇与钢质型材和混凝土结构的竞争。

- Power Plants:** very weak (problem also for stainless steel tubes) exceptions China and India, CO₂ reduction leads to reincarnation of nuclear power plants.
 发电厂：表现疲软（不锈钢管面临着同样的问题），但这一情况在中国和印度有所例外。主要原因在于为减排二氧化碳，核电厂纷纷重启。

World Tube Production

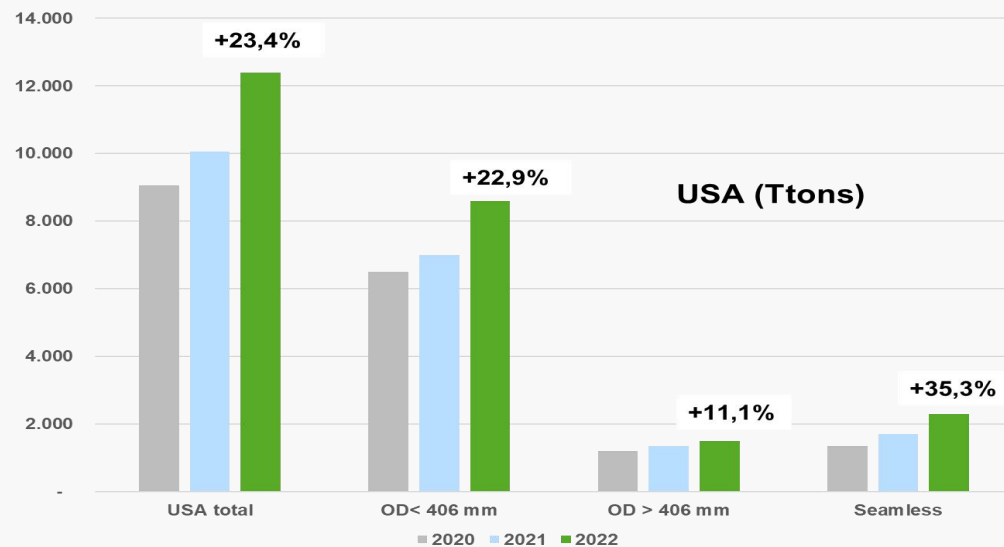
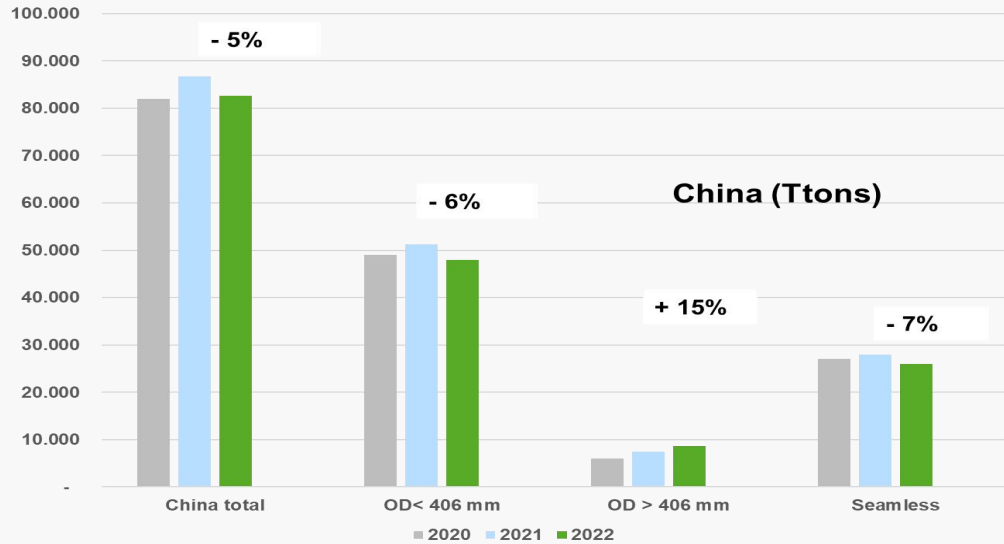
世界管材产量



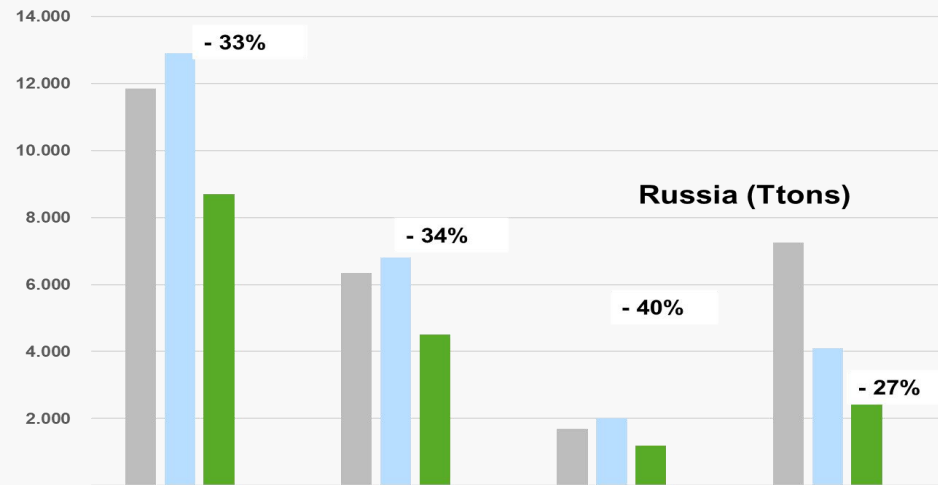
- World tube production** small growth in 2021 now reduced again in 2022 (-4.200 Ttons).
 全球管材产量在2021年小幅增长，但2022年再次下降（降幅为420万吨）
- Geopolitical turbulences** and **Corona** still show its consequences
 地缘政治动荡和新冠疫情仍带来负面影响
- China** is dominating the world tube and pipe production
 中国在世界管材和管道生产中占主导地位
- EU** will loose further capacities due to Vallourec shut down European plants in 2023.
 受瓦卢瑞克公司在2023年关闭其欧洲工厂影响，欧盟产能将进一步减少

Tube Production in selected Regions

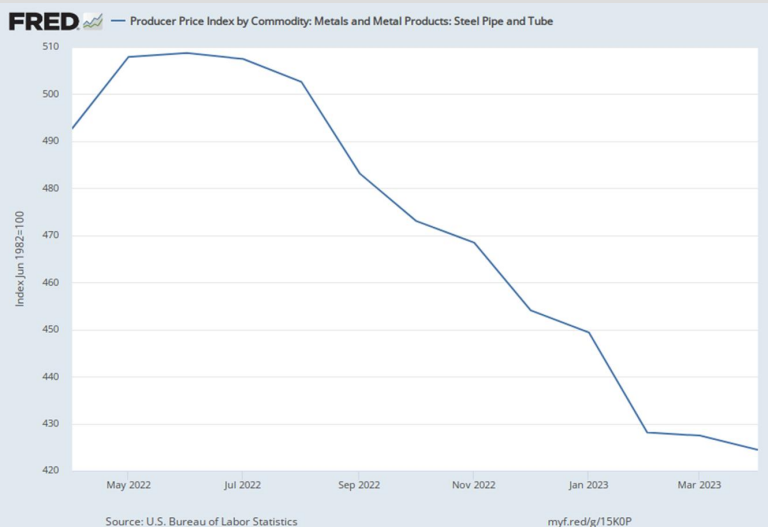
部分地区管材产量



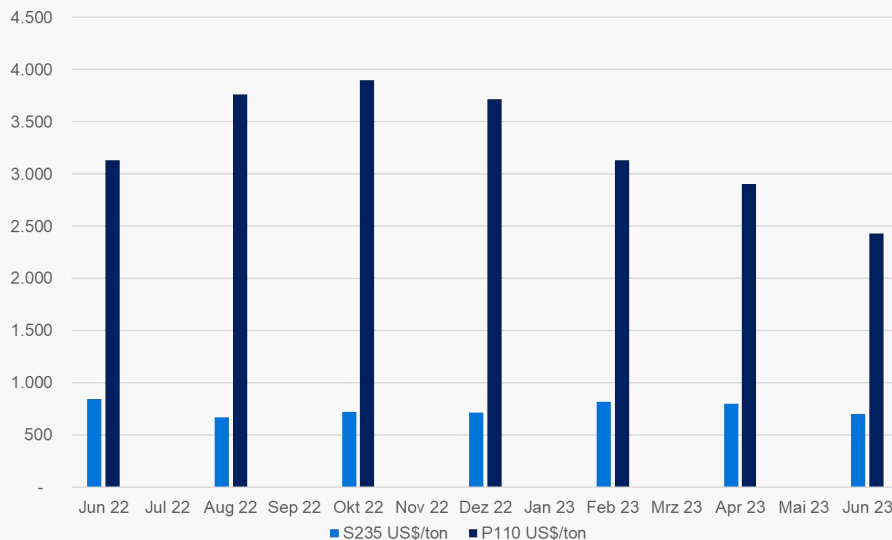
- **China** no recovery after corona lock downs
中国的生产尚未在疫情封控后恢复
(2022 降幅为 420万吨)
- **USA** gaining due to strong OCTG demand
美国因石油专用管材 (OCTG) 需求强劲而获益
(2022年, 增幅为240万吨).
- **Russia** lost 33%
俄罗斯需求下滑33%
(2022年降幅为420万吨)



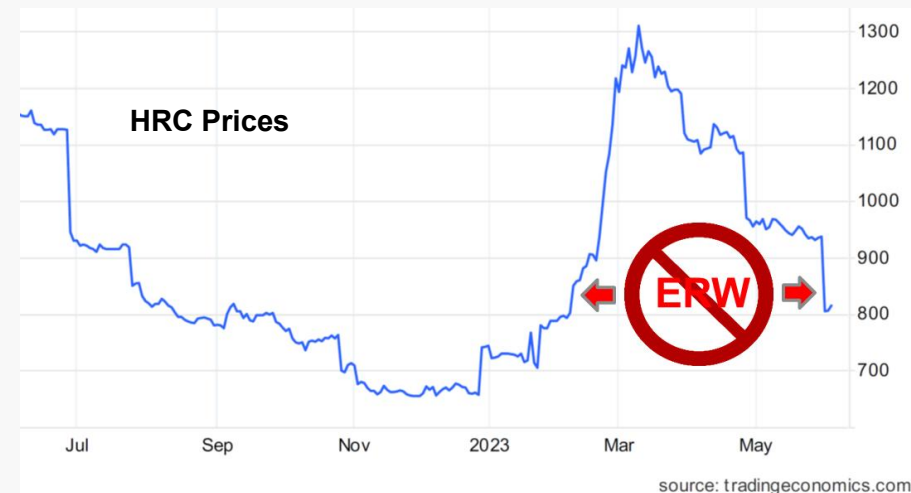
Tube Prices 管材价格



P110 5,5" Casing USA and ERW S 235 FOB Turkey

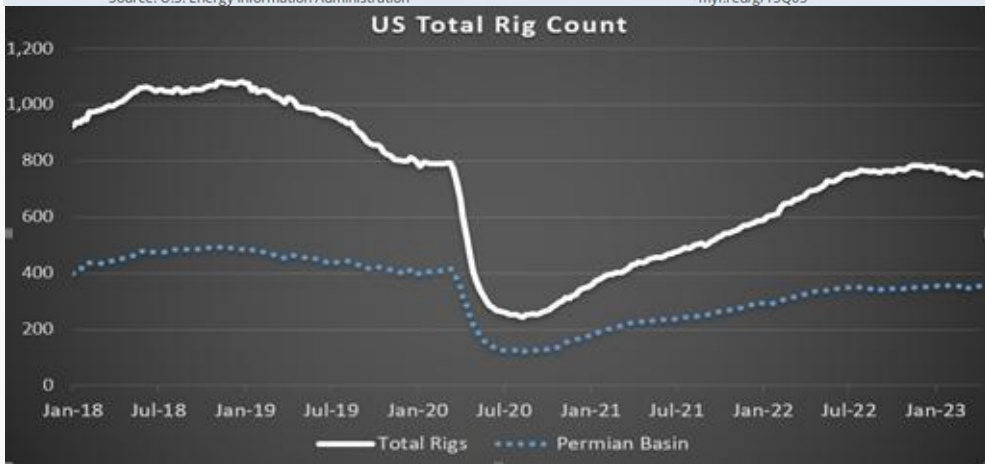
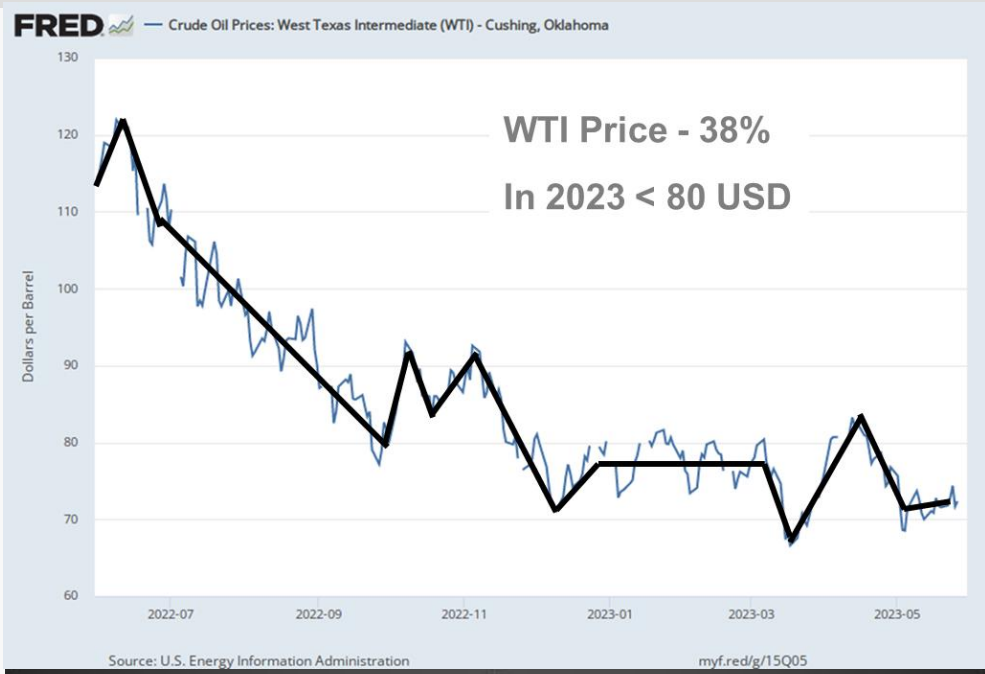


- Tube demand was calming down since mid 2022.
自2022年中期以来，管材需求趋于平稳。
- Tube Price Index down by 16%.
管材价格指数下降了16%。
- OCTG P110 down by 38% (1470 USD) since Oct 22.
OCTG P110 自 10 月 22 日以来下跌了 38% (1470 美元)。
- Hollow sections S235 peaked in Feb. 23 since then down by 15%.
中空型材 S235 在 2 月 23 日达到峰值，此后下跌了 15%。
- HRC prices went up early 2023 and cooled down since March 23
2023 年初热轧钢卷 (HRC) 价格上涨，自 3 月 23 日起有所回落。

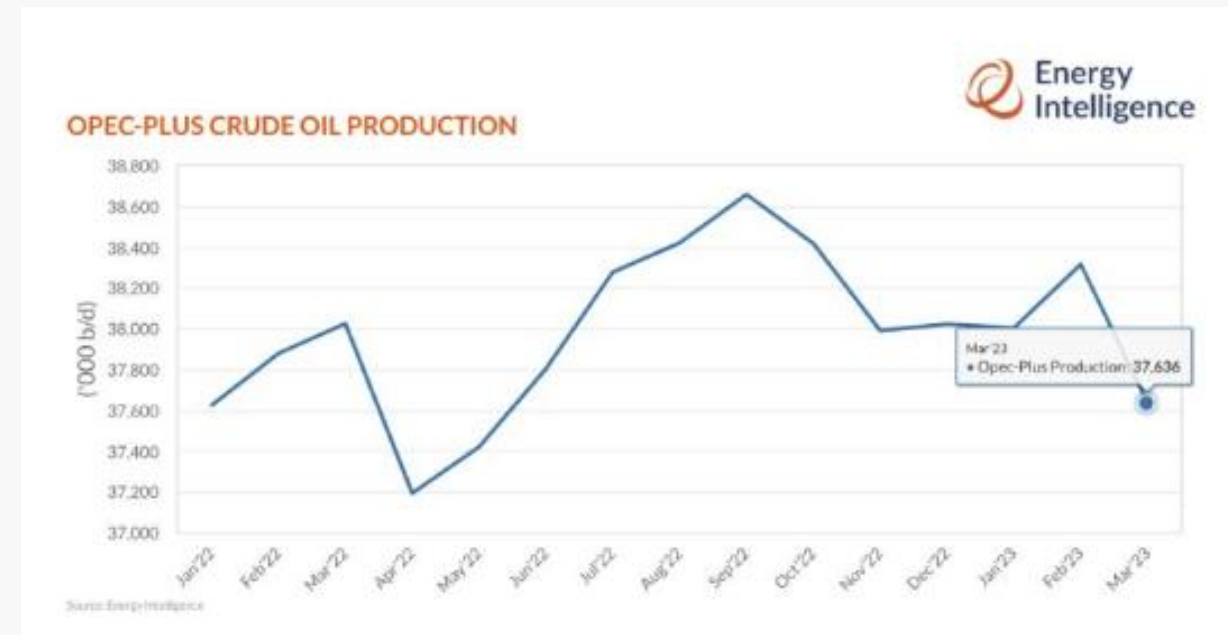


OCTG Market

石油专用管材 (OCTG) 市场



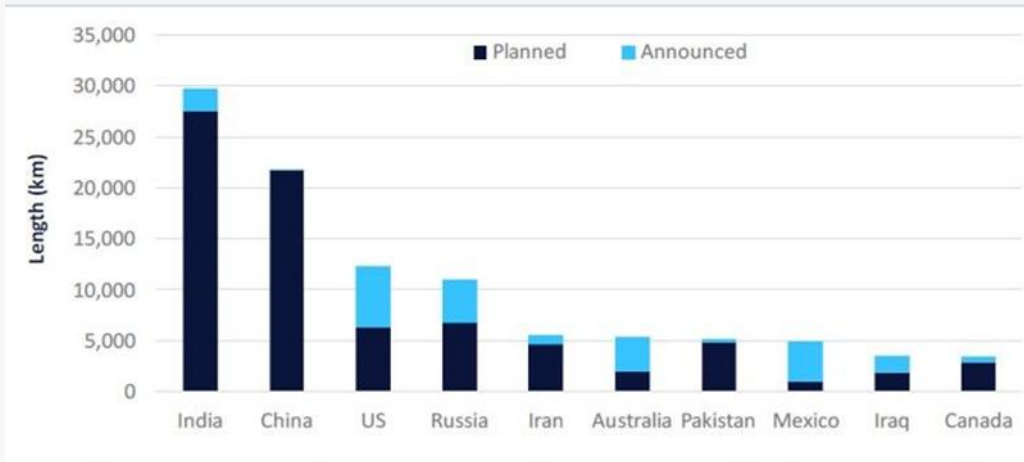
- OCTG consumption depends on oil price.
OCTG消费取决于石油价格。
- To compensate the sanctioned Russian oil and to fight inflation, USA expanded exploration for oil and gas and production of LNG.
为抵消俄罗斯石油贸易受制裁所带来的影响及对通货膨胀，美国扩大了石油和天然气的勘探以及液化天然气 (LNG) 的生产。
- OPEC plus reduced oil production to maintain prices.
OPEC+ 减少石油产量以维持价格。



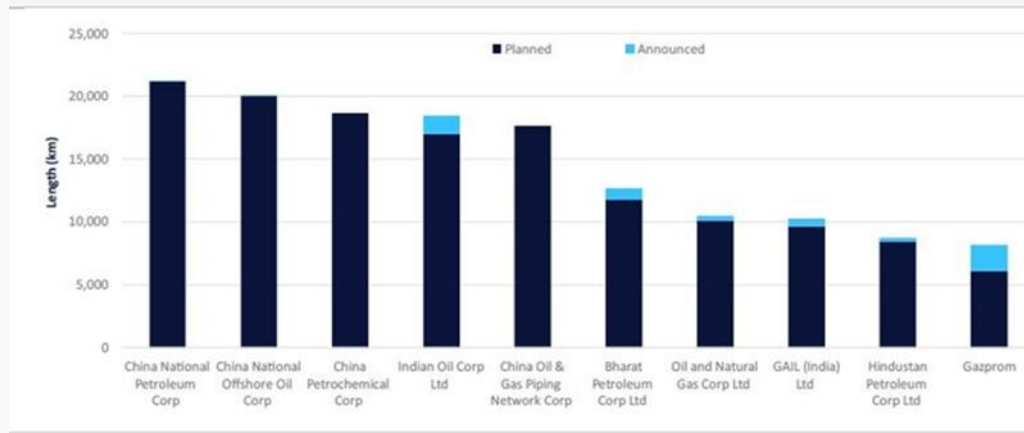
OCTG Market – Pipelines

石油专用管材（OCTG）市场 – 管道

Global planned and announced pipeline length by key countries, 2023–2027 (km)



Global planned and announced pipeline length by key companies, 2023–2027 (km)

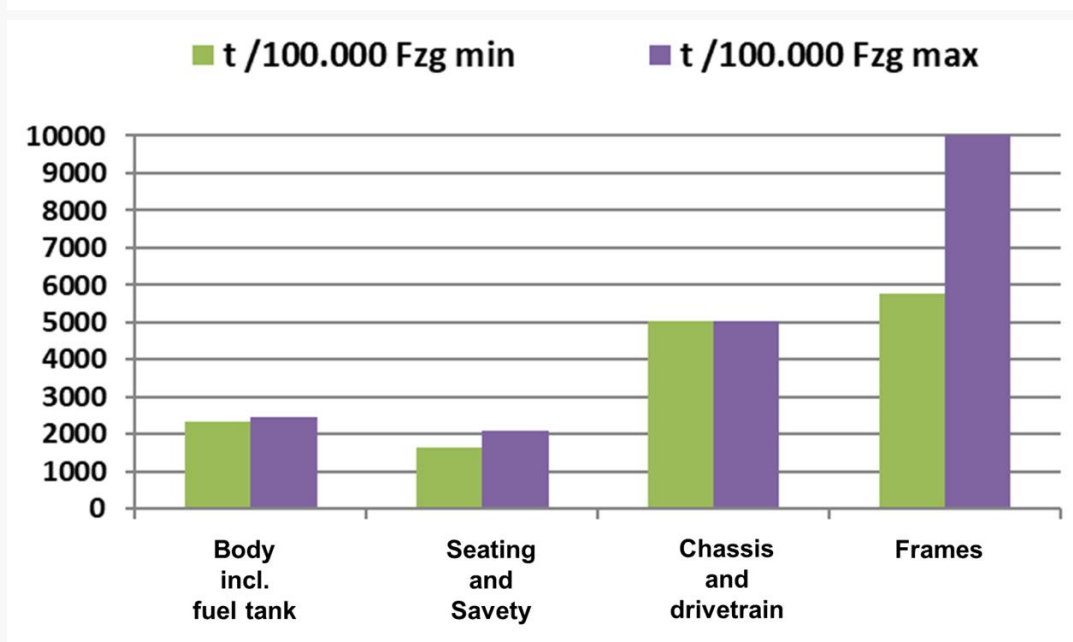


Source: Midstream Analytics, GlobalData Oil and Gas

- **Pipelines** are the most economical way to transport oil and gas. 管道是运输石油和天然气的最经济方式。
- Geopolitical tensions require new pipeline logistics. 受地缘政治紧张局势影响，需要新的管道物流支持。
- India and China become customers for Russian oil and gas. 印度和中国成为俄罗斯石油和天然气客户。
- Remarkable that most pipeline contractors are from China and India. 值得注意的是，大多数管道承包商都来自中国和印度。
- Hydrogen requires new pipeline networks. 氢气需要全新的管道网络。

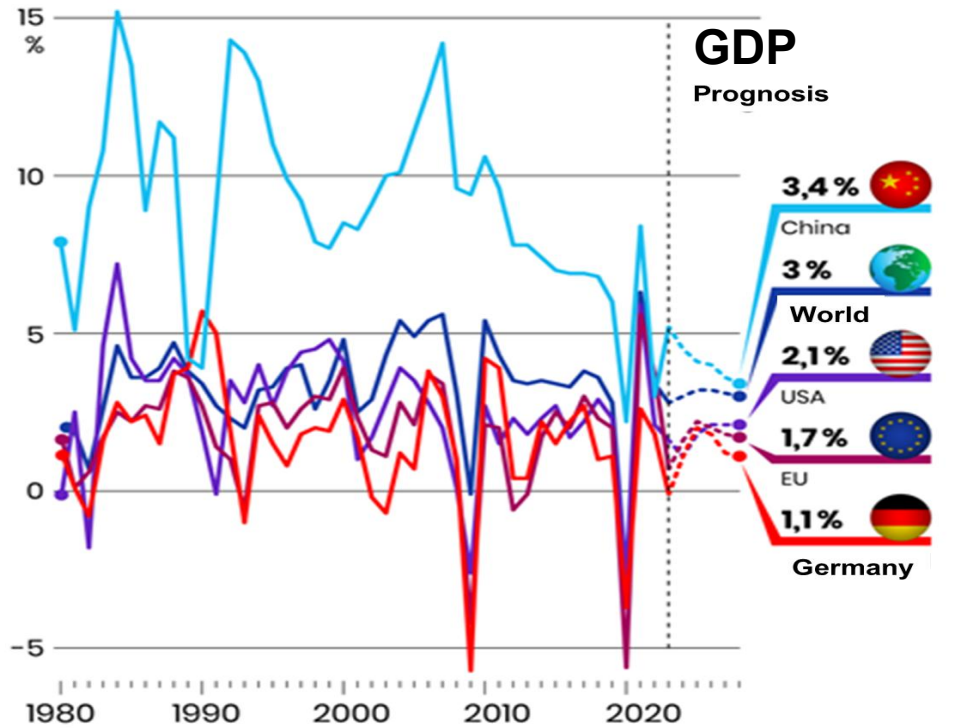
Automotive Market

汽车市场



- The car registration is only slowly recovering.
机动车登记仅缓慢恢复。
- Frames, chassis and drive train are the volume components for tubes.
车架、底盘和传动系统是需要用到管道的主要部分。
- Trend to supply complete components.
当前趋势主要是供应完整组件。
- Trend towards production close to the customer.
未来趋势将要求靠近客户进行生产。
- Trend towards BEVs offer potential for more tubular components to compensate for higher battery weight.
纯电汽车的发展趋势为管材组建提供了发展潜力，以补偿更大电池重量。
- The world will still need combustion engines driven cars, since electrical network for BEVs will not be available.
当今世界仍将需要燃油汽车，因为纯电汽车的电力网络将无法做到完全覆盖全球。

Construction Market 建筑市场



- Growth of GDP and urbanisation creates opportunities for hollow sections/tubes in the construction market.
国内生产总值的增长和城市化进程为建筑市场中的空心型材/管材创造了机会。

- The report, Global Construction 2030, forecasts the volume of construction output will grow by 85% to 15.5 trillion worldwide by 2030, with three countries, China, USA and India, leading the way and accounting for 57% of the global growth.

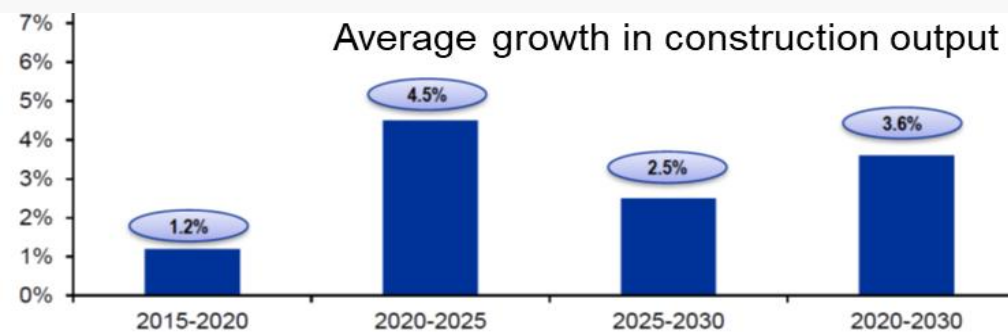
据《2030年全球建筑业》报告预测，到2030年，全球建筑业产值将增长 85%，达到 15.5 万亿，其中中国、美国和印度三国将处于领先地位，占到全球增长的 57%。

- After 2025 the growth of construction output will decline from 4,5% to 2,5%.

2025年后，建筑业产出的增长率将从4.5%下降至 2.5%。

- Infrastructure investments are necessary above all in the Eastern European countries - but the war in Ukraine is delaying them.

在东欧国家投资基础设施是最为必要的 —— 但乌克兰战争拖慢了相关进程。



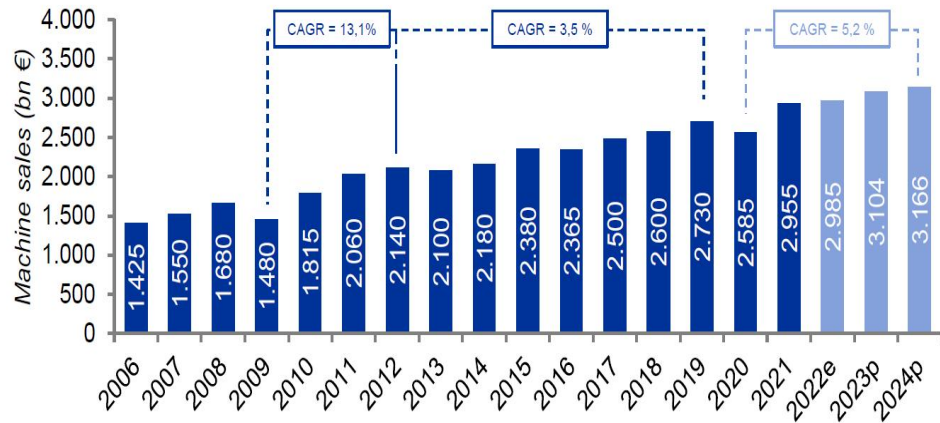
Construction Market 建筑市场



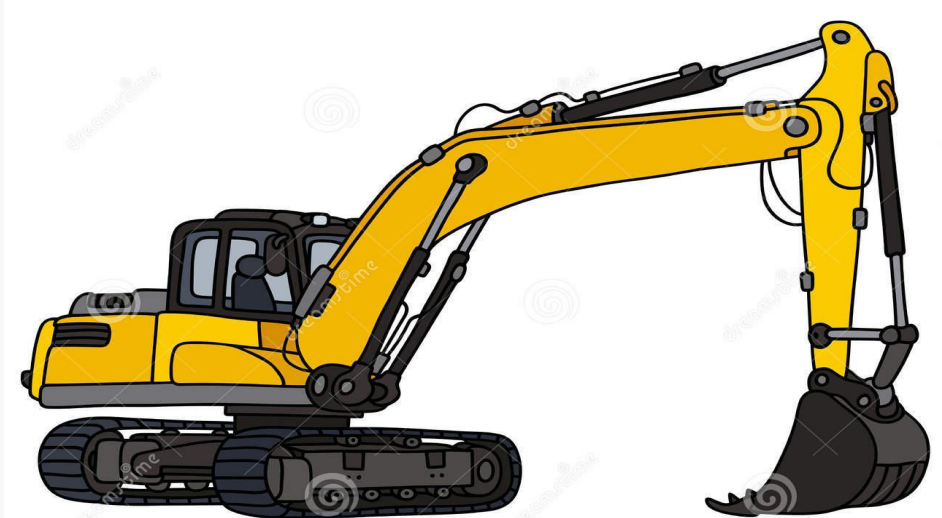
- Tubular profiles/hollow sections are an ideal choice when visible structures are desired.
当需要结构可见时，管状型材/空心管材是理想的选择。
- For skyscrapers the trend in emerging countries to build high-rise towers is supporting the application of hollow structural tube sections.
新兴国家目前的趋势在于兴建高楼大厦，这一点将进一步支持空心结构管材的应用。
- Best mechanical properties and the possibility to bridge large spans.
管材具备卓越的机械性能及用于构建大跨度桥梁的可能性。
- Statics can easier be calculated due to defined shapes.
由于管材形状已固定，更易进行静力学计算。
- Competition between concrete structures, steel profiles (I-,T-beams) and hollow tubular sections.
混凝土结构、钢制型材（工字梁、T字梁）和空心管段之间存在竞争。

Mechanical Engineering Market

机械工程市场

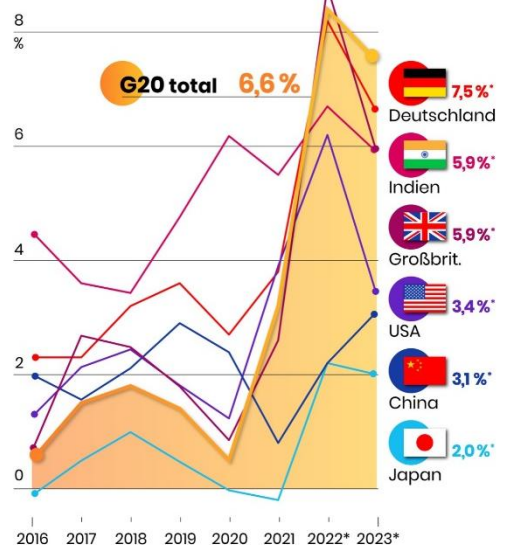
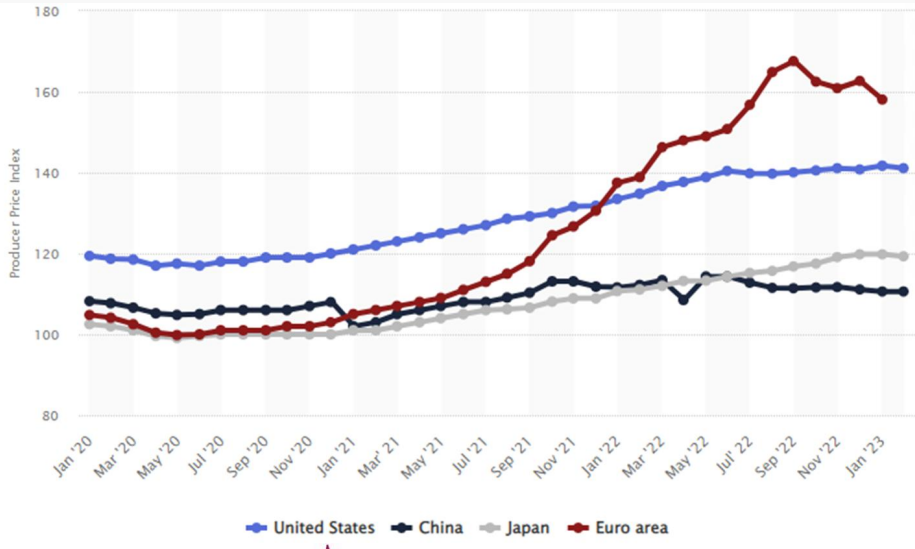


- The market of mechanical engineering for tubes, representing 9% of the total pipe and tube market, is quite diversified due to its uncounted applications.
占比整个管材市场9%的机械工程市场，因层出不穷的应用而变得相当多样化。
- In recent years, good development of machinery sales in line with global GDP.
近年来，机械销售的良好发展与全球GDP保持一致。
- Somewhat higher volatility, as during the financial and corona crises, with stronger decline and fast recovery. In 2022, the current recovery was slowed by geopolitical circumstances.
波动性稍大，就像在金融危机和新冠疫情期间一样，容易大幅下滑和快速反弹。在2022年，当前复苏的步伐受到地缘政治影响而再次放慢。
- Asia and especially China represent the largest markets for machinery sales, with Europe and the USA also remaining significant sales regions.
亚洲，尤其是中国，是当今最大的机械销售市场，同时欧洲和美国也是重要的销售地区。



Challenges for the Tube Industry

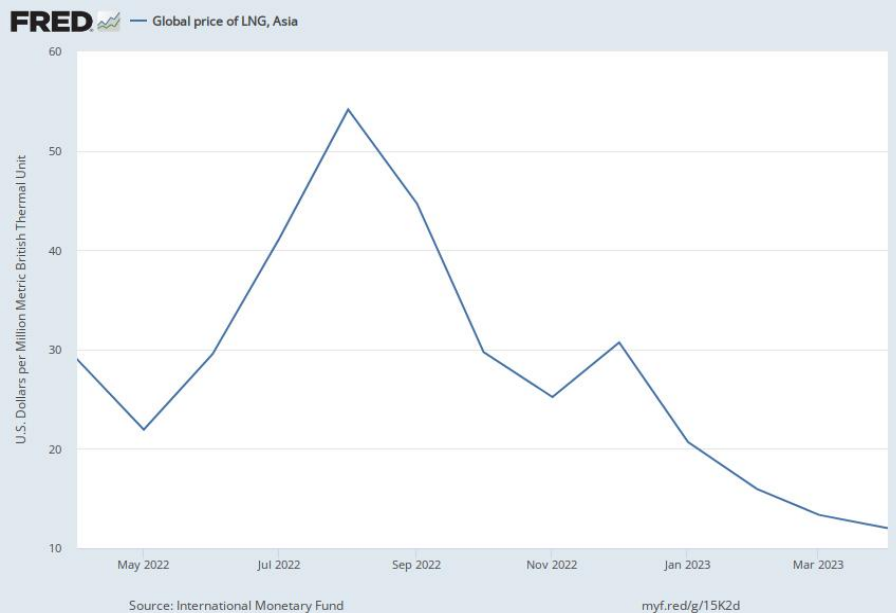
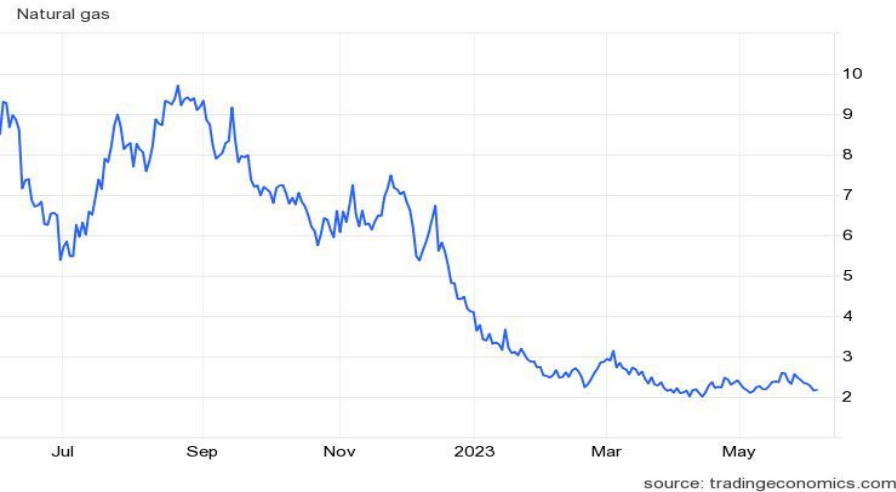
管材行业面临的挑战



- The producer prices are quite different in the world regions. Compared to January 2020, Europe (+44%), USA (+17%), Japan (+10%), China (+3%). 世界各地区的生产价格大相径庭。与2020年1月相比，欧洲（+44%），美国（+17%），日本（+10%），中国（+3%）。
- The inflation is still high despite interventions of the central banks. 尽管各国央行进行了干预，但通货膨胀率仍然居高不下。
- Energy costs, the main driver of inflation are driven by geopolitical conflicts, oligopolistic interventions and political measures. 能源成本，通货膨胀主要驱动因素为地缘政治冲突、寡头垄断干预和政治措施。
- The instrument of central banks, adjusting the interest rates, is limited in its effects hereto. 各国央行的工具在调整利率方面的效果是有限的。
- Inflation remains high, it will take a while to reach the target value of 2% in most regions. 通货膨胀居高不下，在大多数地区需要一段时间才能降至 2% 的目标值。

Challenges for the Tube Industry

管材行业面临的挑战



- The Natural gas price calmed down again, but not all regions take even profit of this trend.
天然气价格再次趋于平稳，但并非所有地区都能从这一趋势中获利。
- Natural gas price 2,16 USD/MMBtu as per June 23.
截至6月23日，天然气价格为216美元/百万英热。
- Some regions, such as Europe nowadays depend on LNG, which requires expensive gas liquefaction.
一些地区，如欧洲，现在非常依赖液化天然气，因而需要昂贵的天然气液化技术。
- LNG price 12,1 USD/MMBtu as per April 23.
截至4月23日，液化天然气价格为121美元/百万英热。
- Political regulations e.g. in Europe regarding prevention of CO₂ emission put additional cost burdens on the industry regarding CO₂ certificates and electrical energy prices. 相关政治规定所带来的额外负担，例如：欧洲对于减少二氧化碳排放的规定要求行业取得二氧化碳证书，或者支付电力能源价格，给整个行业增加了额外的成本负担。

Buyers Guide for the Tube Industry

管材行业买家指南

The ITA Buyers Guide – **who supplies what** - shall provide another service for the tube Industry
管材行业买家指南（谁供应什么）将为管材行业提供全新服务。

- Based on the product categories applied at the TUBE show in Düsseldorf, interested buyers should easily find the listed suppliers for the required products. - A so called matchmaking process.
根据在杜塞尔多夫管材展会上应用的产品类别，感兴趣的买家应该能轻松找到所需产品的上市供应商，这就是所谓的匹配过程。
- **Tubes & Pipes, Machines, Consumables, Services and others** shall be main categories with subcategories.
管材、机械、消耗品、服务和其他主类别下应该有附属的子类别。
- Hitting the selected product or service, all listed relevant suppliers are displayed with:
- Tiles, Company Name and Logo
点击选定的产品或服务，所有收入清单的相关供应商都会显示：- 信息卡片、公司名称和标志
- Hitting the relevant Tile, the company is presented on its own product page with:
- Name, Logo, Photos, Text, relevant Contact Person, Address, e-mail, Web-page, and more
点击相关信息卡片，就会展示该公司的产品页面，包括：名称、标志、图片、文字、相关联系人、地址、电子邮件、网页及更多信息。

Buyers Guide for the Tube Industry

管材行业买家指南

If you think this is a helpful service, please comment. This service is only valuable if a sufficient number of companies are part right from the beginning. We will need to get such feedback.

如果您认为这是一项有用的服务，请发表相关评论。只有足够多的公司从一开始就参与其中，我们的这一服务才会有所价值。因此，我们需要获得此类反馈。

To realize this service, the ITA need **sponsors** who will then be named with logo at the entry page.

The initial cost will be about 10.000 €.

为实现此项服务，ITA需要**赞助商**，赞助商的名称和标志会在主页显示。

初始赞助费约为10.000欧元。

Challenges for the Tube Industry

管材行业面临的挑战

- We must realize, that we are facing disruptive times and the challenges and chances of our tube and pipe industry are regionally quite different around the globe.
我们必须认识到，我们正处于颠覆性的时代，我们管材行业在全球各地所面临的挑战和机遇大不相同。
- So far innovations and entrepreneurship has always allowed our industry to remain sustainable and profitable.
截至目前，创新和创业精神始终驱动着我们的行业保持可持续发展和盈利。
- Artificial Intelligence incorporated in Industry 4.0 measures are increasingly providing chances to optimize the entire production- and logistic processes.
工业4.0进程中人工智能的发展正为我们带来更多可以完善整个生产和物流流程的机遇。
- This positive mood shall lead our way.
这种积极的心态将引领我们一路向前。
- I wish you all a great conference and fruitful conversations.
我祝愿大家都从本次精彩的会议和富有成效的对话中有所收获。



Your Global Tube Platform

全球管材平台



MANAGEMENT CONSULTANCY
Dr. Gunther Voswinckel

Street: Scharnhorststr.45
City: 41063 Mönchengladbach
Telephone: +49 2161 309255
Fax: +49 2161 912520
Email: contact@vosco.net

Website: www.vosco.net