SPIRAL PIPE PLANTS
Tailor-made solutions with measurable benefits
SMS GROUP
Leaders in plant construction
and machine engineering

The SMS group unites global players in the construction of plants and machines for the processing of steel and NF metals, operating under the roof of SMS Holding GmbH. It consists of the two business areas, SMS Siemag and SMS Meer, as well as industrial participations. SMS Holding GmbH is responsible for strategic planning and control. The sole owner of the SMS group is Siemag Weiss GmbH & Co. KG, the holding of the Weiss entrepreneurial family.

FAMILY-OWNED AND WORLDWIDE PRESENT
As a family-owned company, the SMS group has built on solid values and a culture of responsibility for four generations. It holds a strong market position, while its decentralised structure ensures a fast and efficient response to individual customer demands. The SMS group combines the flexibility of company units that operate as medium-sized enterprises with the broad resources of an internationally active company – all to the benefit of the business partners. The decentralised corporate culture ensures that not only the individual units, but also the employees always think and act in an entrepreneurial manner.

BUILDING ON A STRONG BASIS
A long-term view, careful financial management, the focus on values, plus an understanding of the cycles of the machine and plant construction market have guided the group’s strategic planning for decades. Also high on the agenda are investments in the areas of energy and environment technology, service and modernisation of plants as well as on-the-job training and qualification of core employees. On this basis, the SMS group creates tailor-made plant solutions which enable its business partners to keep well ahead of the competition.
PWS
A flexible, reliable partner – for the lifetime of your plant

PWS is the world leader in plant construction and mechanical engineering for the production of spiral pipes. High standards of quality economically produced – this is what PWS customers have relied on ever since the company’s founding. PWS develops tailor-made systems, from individual machines to turnkey integrated plants for oil and gas pipes as well as water pipes and piling pipes. With our service customers can be sure that even after decades of use production will continue to run smoothly.

MEASURABLE CUSTOMER BENEFITS
PWS has been part of the SMS Meer Business Area and SMS group since 2008. The innovative solutions the Business Area provides afford customers measurable benefits within their challenging markets. Whether it’s steel for car wheels, pipeline tubes, heavy structuralists, wheels for high-speed trains, aluminum for façade construction or offshore wind turbines: the machines and plants tailored by SMS Meer ensure the cost-efficient and flawless production of the necessary parts.

INDIVIDUAL SOLUTIONS
SMS Meer concentrates the competence of globally successful specialist firms under one roof to create a unique, full range of supplies and services for metal processing and associated fields. In doing so, the employees focus consistently on the requirements of their partners. SMS Meer finds individual solutions and fulfills customers’ expectations, both flexibly and reliably. This is verified by 17,000 reference projects for satisfied customers the world over.
PORTFOLIO
Resource-efficient solutions for
spiral pipe production – from PWS

No matter what it is – oil and gas pipes, water pipes or piling pipes – PWS has the right solution for every customer. If our business partners need an individual machine or a turnkey integrated plant, we can provide it. We always tailor the equipment precisely to their requirements. We take a comprehensive approach in terms of both machinery and service: just like our customers, we keep an eye on the entire production process, from the raw material to the finished product.

<table>
<thead>
<tr>
<th>RAW MATERIAL</th>
<th>COIL PREPARATION</th>
<th>PIPE FORMING</th>
<th>PIPE WELDING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coiled, hot rolled steel strip</td>
<td>- Coil preparation stand</td>
<td>Spiral pipe mills (online/offline) with</td>
<td>Submerged arc welding systems for finish-welding or re-welding with</td>
</tr>
<tr>
<td></td>
<td>- Strip accumulator</td>
<td>- strip cross welder</td>
<td>- automatic pipe feeding and discharge system</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- weld testing</td>
<td>- automatic welding start positioning system</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- pipe forming stand</td>
<td>- automatic welding seam tracking system</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- SAW station</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- MAG tack welder</td>
<td></td>
</tr>
</tbody>
</table>

COORDINATED RANGE
PWS plant and machinery are available for the production of spiral pipes by the conventional 1-stage process as well as the 2-stage process which is also called offline-process. In the first stage the pipe is formed and continually tack-welded at high speed. In the second stage the pipe is finish-welded using SA-welding technology. The advantages of this are higher productivity and improved quality to meet...
the requirements of modern and robust pipeline tubes. However pipe forming and innovative pipe welding are just a part of our integrated solutions: PWS customers also rely on our plant and equipment for coil preparation, pipe end finishing and quality control. When it comes to turnkey concepts, we also deal with the infrastructure, for example systems for pipe transportation or quality management.

**COMPETITIVE ADVANTAGES**

Many years of experience and unrivalled expertise – PWS customers benefit from both. We set standards in spiral pipe technology as well as automation, process and welding technology. This gives our customers their competitive edge.

Using our digital welding technology, customers achieve efficiencies of up to 90 per cent, for example. Compared to other solutions this means energy savings of more than 30 per cent. It certainly pays off – not just for new plants but for the modernization of existing equipment too.

### CONCEPTS

**PIPE END FINISHING**
- Pipe end chamfering machine

**PRESSURE TESTING**
- Hydrostatic pipe tester (hydrotester)

**QUALITY CONTROL**
- Ultrasound system (ultrasonic testing)
- X-ray testing system (fluoroscopy and x-ray)

**PRODUCTS**
- Spiral-formed pipes with a diameter of 408 to 3048 mm and wall thicknesses of 5.2 to 25.4 mm
- Driven tubes (piling)
- Water pipes (AWWA)
- Oil and gas pipes (API)
The Business Area SMS Meer is represented worldwide. 17,000 reference installations demonstrate the market’s confidence in the expertise, experience, reliability and flexibility of the company.

No matter where the customers work and what language they speak – the right people at SMS Meer are always on hand. In this way SMS Meer can support its business partners quickly and effectively.
The information provided in this brochure contains a general description of the performance characteristics of the products concerned. The actual products may not always have these characteristics as described and, in particular, these may change as a result of further developments of the products. The provision of this information is not intended to have and will not have legal effect. An obligation to deliver products having particular characteristics shall only exist if expressly agreed in the terms of the contract.