



Dunes plant  
Toll manufacturing

# An historical competence at the service of customers

**The Dunes plant, located in Dunkirk, is part of the Swiss Steel Group and is a key player in the field of metallurgy.**

The Dunes plant is today one of the most important heat treatment plant in Europe.

Indeed, as part of Ascometal Group for decades, and its older history (100 years of steelmaking), has enabled it to build up a portfolio of customers in the various fields of the Mechanical, Oil & Gas, and Automotive industries and more recently in the wind Energy, Aeronautics and Nuclear fields.

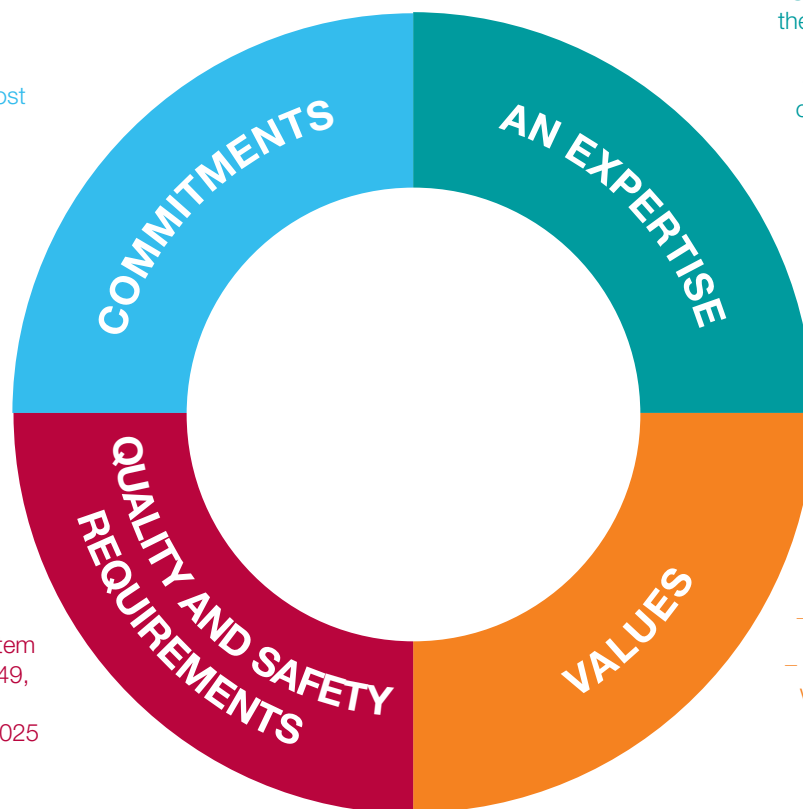
It is specialized in the heat treatment of large section bars (60 to 320 mm diameter) and is equipped with cold finishing facilities.

- A complete and evolving offer
- A renowned quality, requested by the most important OEM and their subcontractors

- Skilled teams who master the entirety of the industrial processes and who ensure the technical and commercial development

- Certified Quality system ISO 9001, IATF 16949, and a laboratory qualified ISO CEI 17025
- ISO 45001 qualified

- Customers satisfaction
- Expert women and men with proven competence
- Technical support for our customers



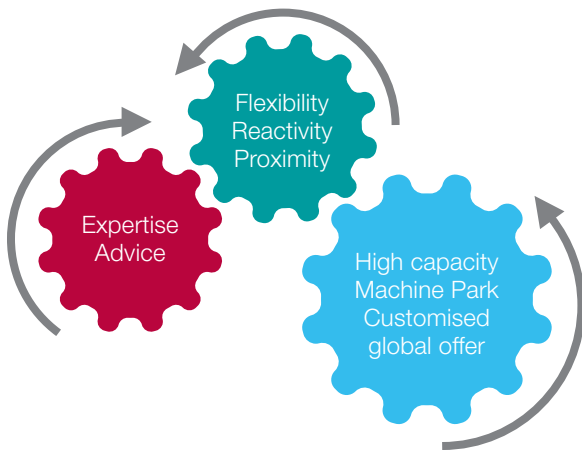


# A know-how and industrial capacities

Strong of this past, it diversifies today, to offer to its customers, an expertise, an advice, in the various fields of toll manufacturing, in the various operations such as heat treatment, cold bars finishing, blanks, machined parts, on steels, stainless steels and aluminum.

Thanks to all the capacities present on the site, you will be able to benefit from a great flexibility and a high level of service.

The expertise of its employees will be made available to you, to guarantee tests, toll manufacturing according to national and international standards.



# Toll manufacturing on steel grades (carbon and alloyed), stainless steels and aluminum



## Customised packaging

- Corrosion protection: mineral oil, peelable wax (ANTICO).
- Shock protection: silicone spring ring and cardboard, boxes, plastic protections...
- Marking on face or generator by micro-percussion or labels.
- Delivery in bulk, in bundles ( $\varnothing \leq 160$  mm, 5 To max), in containers or wood pallets.
- Colour coding with RAL paint.



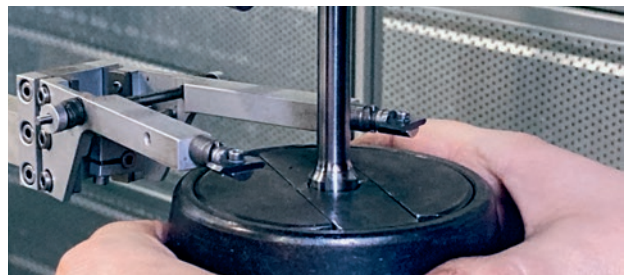
## Customised Machining

- Precision mechanics for all types of parts.
- Manufacture of single parts to small and medium series machining.
- Accurate and rigorous control (ISO 9001).
- Boring.
- Threading.
- CN turning: numerically controlled lathe in 3 and 4 axes, max length 500 mm, max  $\varnothing$ : 210 mm.
- CN milling: 3 and 4-axis machining center.
- Sawing (max 500 kg, dimensions 2x1m max).
- Core drilling (19, 25, 32 mm).



## Metallographic analysis

- Inclusion cleanliness according to ASTM E45, ISO4967 and DIN50602.
- Grain size measurement according to ISO643 and ASTM E112.
- Scanning electron microscope analysis + EDX (chemical analysis).
- US in water tank on round block ( $\varnothing$  200 mm max) or flat block (40 mm thick), length 500 mm max and weight 250 kg, max. Frequency 10 MHz, FBH max 0.3 mm according to SEP 1927.



## Mechanical testing

- COFRAC 17025 certified laboratory ([www.cofrac.fr](http://www.cofrac.fr)).
- The tests can be carried out on the basis of raw parts thanks to an integrated machining workshop and according to ASTM A370, ISO 148-1 et ISO 6892-1 standards.
- Tensile tests at room temperature.
- Charpy impact tests from -60°C to room temperature.
- Hardness testing (Brinell and Rockwell).
- Possibility of external approvals (LRS, DNV, ABS...).



# Capacities and technical capabilities

## Heat treatment capacities

Type	Number	T°C	Diam.	Length	Treatment	Standards
Continuous furnaces	2	750 - 1,150	50 - 325 mm	4.2 - 13.5 m	Water quenching (spray) Normalisation	SAE AMS 2750 SAE AMS H 6875 API 6A annex M
Batch furnaces	7	450 - 760	50 - 325 mm	4.2 - 13.5 m	Tempering Stress relieving Annealing Spheroidizing Isothermal	SAE AMS 2750 API 6A annex M

## Finishing capacities

Operation	Diam.	Length	Tolerance	Report
Straightening*	60 - 350 mm	4 - 13.5 m	1 mm/M min	○
Peeling K2*	66 - 200 mm	4 - 13.5 m	Quality 11 max (h, js, k) Ra ≤ 125 μinch / ≤ 3.2 μm Ovality: Tolerance Ø / 2	○
Peeling K3*	180 - 320 mm	4 - 13.5 m	Quality 11 max (h, js, k) Ra ≤ 250 μinch / ≤ 6.3 μm Ovality: Tolerance Ø / 2	○
Peeling/Roller burnishing	74 - 320 mm	4 - 13.5 m	Quality 10 max (h, js, k) Ra ≤ 63 μinch / ≤ 1.6 μm Ovality: Tolerance Ø / 2	○
Band sawing	25 - 313 mm	4 - 13.5 m Mini delivery: 2.5 m	-0 mm / +5 mm Lg ≤ 7 m, Δ⊥ +/-0.5% of the Ø Lg > 7 m, Δ⊥ +/-1% of the Ø	○
Circular sawing	75 - 320 mm	4 - 13.5 m Mini delivery: 2.5 m	-0 mm / +10 mm Lg ≤ 7 m, Δ⊥ +/-0.5% of the Ø Lg > 7 m, Δ⊥ +/-1% of the Ø	○
Material blanking / Precision sawing	25 - 313 mm	135 mm - 6.8 m	-0 mm / +3.5 mm Δ⊥ +/-1% of the Ø	○
Ultrasonic control	75 - 313 mm	4 - 12.5 m	COFREND certified operator. EN 10308 - EN 10228 - SEP1921 - API 6A PSL1-3	● ○ (Report US)
Ultrasonic control 100% Phase array technology	79 - 330 mm	4 - 13.5 m	COFREND certified operator. EN 10308 - EN 10228 - SEP1921 - API 6A PSL1-3 - API 7-1 - FBH min 1 mm Angle beams	● ○ (Report US + Cartography)
Eddy current and visual surface defect control	75 - 330 mm	4 - 13.5 m	COFREND certified operator EN 10221. Detection threshold maxi: depth 0.5 mm – length 10 mm	●
Shot blasting	75 - 260 mm	4 - 13.5 m	Cleaning surface Hammered surface finishing	
Mechanical testing			Certified laboratory COFRAC 17025 www.cofrac.fr	●
Metallographic analysis				●

\* Maximum hardness: 400 HB / 1350 MPa / 44 HRC.  
Soft annealing could be necessary for these operations

○ Option  
(additional)  
● Standard



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