Underfloor Wheel Lathe

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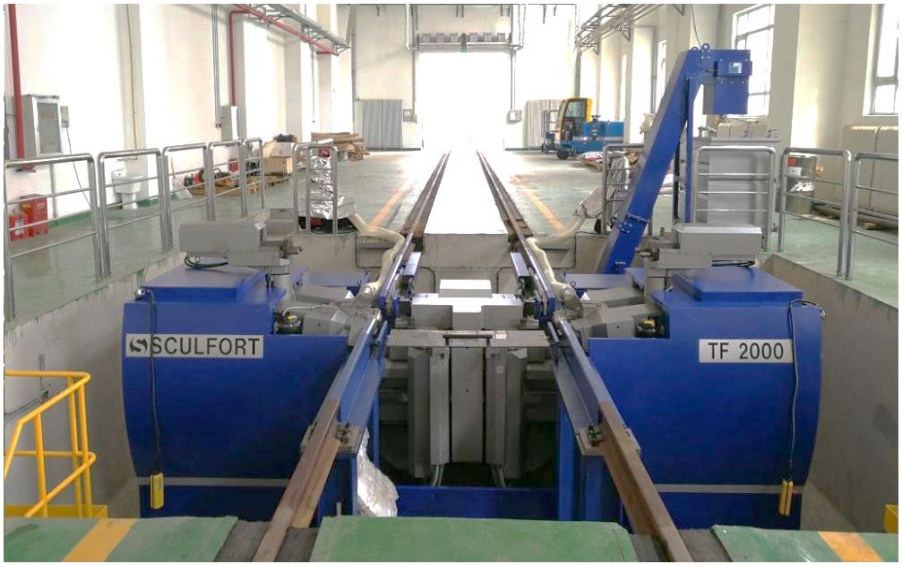

TF2000 – Underfloor Wheel Lathe
TF2000HD – Underfloor Wheel Lathe – Heavy Duty

SCULFORT Underfloor Wheel Lathe was developed in consultation with metro, tramway and train operators. The TF2000 Underfloor Wheel Lathe can receive metros, trams and trains with an axle load of less than 20 tons. The TF2000HD Underfloor Wheel Lathe can receive trains and locomotives with an axle load of less than 30 tons.

Operation principle:

Single lathe TF2000 and TF2000HD achieve reprofiling two wheels in 30 minutes.
The lathe is CNC controlled and masters the 5 cycles:

- Vehicle positioning
- Profile measuring before machining
- Wheel profiling and break discs machining
- Profile measuring after machining
- Vehicle removal

For each type of wheel, several profiles are available: standard or economy. Once the measurement process achieved, the CNC can calculate the new wheel dimensions with minimum machining. The operator has the choice between validating and modifying the CNC proposal.
At the end of the cycle, the CNC delivers a machining report, gathering all the information necessary for the railway operator.

Lathe component

In order to ensure the operator ergonomics, the lathe comprises:

- A control panel facing the working area
- An Autodiagnostic and Telemaintenance system
- An optional positioning shunting device
- A chip disposal device (accessory)
- A smoke extractor (optional)

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Underfloor Wheel Lathe

TF2000 – Underfloor Wheel Lathe
TF2000HD – Underfloor Wheel Lathe – Heavy Duty

SCULFORT Underfloor Wheel Lathe was developed in consultation with metro, tramway and train operators. The TF2000 Underfloor Wheel Lathe can receive metros, trams and trains with an axle load of less than 20 tons. The TF2000HD Underfloor Wheel Lathe can receive trains and locomotives with an axle load of less than 30 tons.

Technical Characteristics:

Length	5200 mm
Width	2200 mm
Distance between pit floor and rail top	2000 mm
Height (without hold down device)	2200 mm
Weight of the UWL	Approximate total weight is 18 000 kg
Track gauge	1000 - 1435 - 1676mm
Maximum axle load	25000 daN
Hold down force (total on wheelset)	Max. 5000 daN
Wheel diameter on tread	500 to 1400 mm
Wheel width	80 to 160 mm
Maximum cutting effort	1700 daN
Minimum cutting depth	0.2 mm
Maximum cutting depth	10 mm
Cutting speed	0 to 200 m/min
CNC Model	SIEMENS 840D
Measure increment	1 µm
Measure display	1 µm
Quantity of programmed profile data	Depending on option
Capacity of stored profile data	100
Program language	SIEMENS Step7 (Ladder)
Hydraulic oil	160 L
Recommended hydraulic oil	norm ISO HM46
Greasing pump	2L
Recommended lubricating oil	norm ISO G68
Total installed power	90 Kw
Power supply required	AC 400V - 3ph - 50Hz
Required Compressed air (dry / clean)	1 m3/h – 6 bars

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Tandem Underfloor Wheel Lathe

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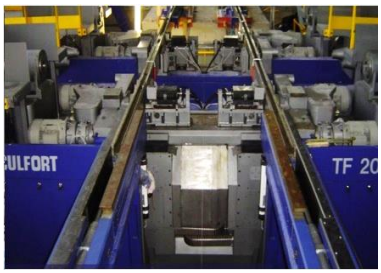

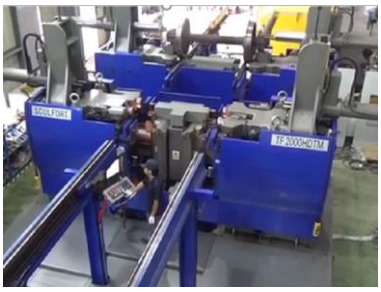

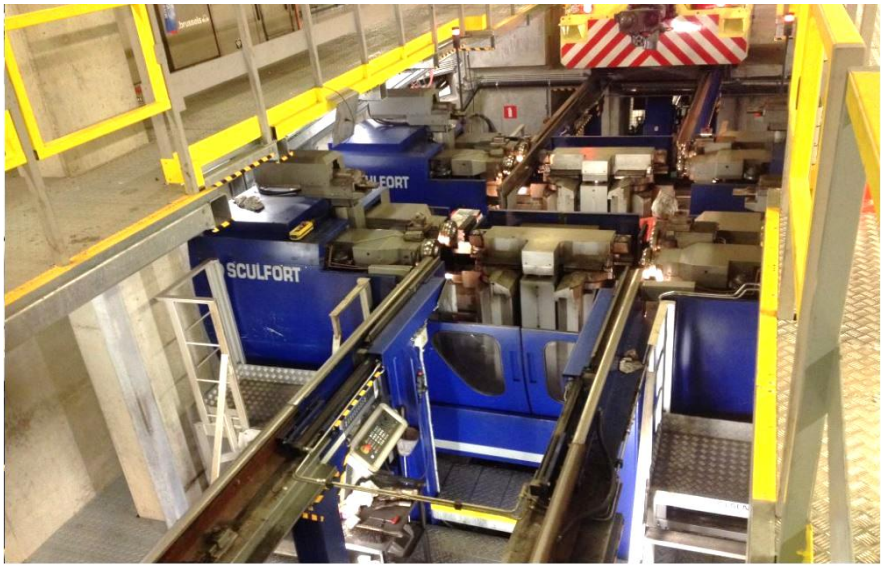

TF2000TM – Tandem Underfloor Wheel Lathe
TF2000HDTM – Tandem Underfloor Wheel Lathe – Heavy Duty

SCULFORT Tandem Underfloor Wheel Lathe was developed in consultation with metro, tramway and train operators. The TF2000TM Tandem Underfloor Wheel Lathe can receive metros, trams and trains with an axle load of less than 20 tons. The TF2000HDTM Tandem Underfloor Wheel Lathe can receive trains and locomotives with an axle load of less than 30 tons.

Operation principle:

Tandem lathe TF2000TM and TF2000HDTM achieve reprofiling for wheels of one bogie in less than 40 minutes.
The lathe is CNC controlled and masters the 5 cycles:

- Vehicle positioning
- Profile measuring before machining
- Wheel profiling and break discs machining
- Profile measuring after machining
- Vehicle removal

For each type of wheel, several profiles are available: standard or economy. Once the measurement process achieved, the CNC can calculate the new wheel dimensions with minimum machining. The operator has the choice between validating and modifying the CNC proposal.
At the end of the cycle, the CNC delivers a machining report, gathering all the information necessary for the railway operator.

Lathe component

In order to ensure the operator ergonomics, the lathe comprises:

- A control panel facing the working area
- An Autodiagnostic and Telemaintenance system
- An optional positioning shunting device
- A chip disposal device (accessory)
- A smoke extractor (optional)

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Tandem Underfloor Wheel Lathe

TF2000TM – Tandem Underfloor Wheel Lathe
TF2000HDTM – Tandem Underfloor Wheel Lathe – Heavy Duty

SCULFORT Tandem Underfloor Wheel Lathe was developed in consultation with metro, tramway and train operators. The TF2000TM Tandem Underfloor Wheel Lathe can receive metros, trams and trains with an axle load of less than 20 tons. The TF2000HDTM Tandem Underfloor Wheel Lathe can receive trains and locomotives with an axle load of less than 30 tons.

Technical Characteristics:

Length	5200 mm
Width	5400 mm
Distance between pit floor and rail top	2000 mm
Height (without hold down device)	2200 mm
Weight of the whole machine	Approximate total weight is 40 000 kg
Dimensions of the mobile table	2665 mm
Mobile table stroke	1000 mm
Bogie Wheelbase	1600 mm à 2600 mm
Track gauge	1000 - 1435 - 1676mm
Maximum axle load	25000 daN
Hold down force (total on wheelset)	Max. 5000 daN
Wheel diameter on tread	500 to 1400 mm
Wheel width	80 to 160 mm
Maximum cutting effort	1700 daN
Minimum cutting depth	0.2 mm
Maximum cutting depth	10 mm
Cutting speed	0 to 200 m/min
CNC Model	SIEMENS 840D
Measure increment	1 µm
Measure display	1 µm
Quantity of programmed profile data	Depending on option
Capacity of stored profile data	100
Program language	SIEMENS Step7 (Ladder)
Hydraulic oil	160 L
Recommended hydraulic oil	norm ISO HM46
Greasing pump	2L
Recommended lubricating oil	norm ISO G68
Total installed power	90 Kw
Power supply required	AC 400V - 3ph - 50Hz
Required Compressed air (dry / clean)	1 m3/h – 6 bars

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