

# Astrup MDS

**AISI 4140 / 4140 Mod**

## Material Description

Engineering steel bars. Hotrolled, hardened and tempered, straightened, peeld

## Quality

AISI 4140 / 4140 Mod

## Chemical composition

	C %	Si %	Mn %	Cr %	Mo %	Ni %	P %	S %	Al %	Cu %	V %	Sn %
<b>Min</b>	<b>0,38</b>	<b>0,15</b>	<b>0,75</b>	<b>0,80</b>	<b>0,15/0,25</b>				<b>0,015</b>			
<b>Max</b>	<b>0,43</b>	<b>0,35</b>	<b>1,2</b>	<b>1,2</b>	<b>0,25/0,35</b>	<b>0,25</b>	<b>0,025</b>	<b>0,025</b>	<b>0,035</b>	<b>0,25</b>	<b>0,03</b>	<b>0,10</b>

## Technical requirements

- Acc. to NACE 0175 / ISO 15156, Max 22 HRC
- API 6A PSL3
- Yield  $\geq 586$  N/mm<sup>2</sup> 85 Ksi
- Tensile RM = 690 N/mm<sup>2</sup> 100 Ksi
- Charpy V Test at -29 C<sup>o</sup> min 42J
- Elongation min 20%, Red of Area min 40%
- Test pos. Longitudinal on mid radius <7" dia and 1" below surface on >7" dia
- All according to ASTM A370

Increased Mo is preferable for lager bolts than 6" for a more even hardening proses

## Certificate

Acc to EN 10204/3.1

## Form of supply

Lengths from 4,8-6 meter.

## Marking

Astrup purchase number, each bar to be hard stamped with charge number, marked with quality and dimension.