

# OVAKO 495 HOLLOW BAR

## RELATED SPECIFICATIONS:

USA	ASTM A579 (23)
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## DESCRIPTION:

Ovako 495 is a high strength quench and tempering steel with high wear resistance, good toughness and good dimension stability. The steel can be tempered at high temperatures and still maintain a high hardness and high strength. And it is microalloyed to obtain a precipitation hardening effect. The through hardenability corresponds to a bar with approx. 100mm diameter (oil quenched).

## APPLICATIONS:

Ovako 495 is mainly used for drill heads.

## CHEMICAL ANALYSIS:

	C %	Si %	Mn %	P %	S %	Cr %	Ni %	Mo %	V %
Min.	0.47	0.20	0.75	-	0.013	1.00	0.43	0.93	0.11
Max.	0.50	0.30	0.85	0.15	0.02	1.20	0.50	1.00	0.15

## HEAT TREATMENT RECOMMENDATIONS:

	Temperature	Cooling/quenching
<b>Forging</b>	1100-850	In air
<b>Normalizing</b>	900-950	In air
<b>Soft annealing</b>	650-730 / 2hr	Slow cooling in furnace to 600°C then in air
<b>Carburizing</b>	850-930	In air or oil
<b>Hardening</b>	840-880	In oil
<b>Tempering</b>	200-700	In air

## TEMPERING RESPONSE:

The tempering response curve for Ovako 495 shows the hardness after quench and tempering at different temperatures. Samples were Austenitized at 860°C and quenched in oil, then tempered one hour at different temperatures. The diagram is only informative.

