

# POWDER METAL STEEL

## Comparison Chart



STANDARD ALLOY	UDDEHOLM GRADE	BOHLER GRADE
M2	—	No P/M Equivalent (Bohler S600)
M3 Type 2 Low S	Uddeholm Vanadis® 23 SuperClean™ †	Bohler S790 MICROCLEAN® †
M3 Type 2 with Co	Uddeholm Vanadis® 30 SuperClean™	Bohler S590 MICROCLEAN®
M4	Uddeholm Vanadis® 6 SuperClean™ † (cold work applications only)	Bohler S693 MICROCLEAN®
M4 High Carbon	No P/M Equivalent	Bohler S692 MICROCLEAN®
M4 High Silicon	No P/M Equivalent	Bohler S690 MICROCLEAN® †
M42	No P/M Equivalent	No P/M Equivalent (Bohler S500)
M42 Co Free	No P/M Equivalent	No P/M Equivalent
M48	No P/M Equivalent	No P/M Equivalent
T15 Modified	Uddeholm Vanadis® 60 SuperClean™	Bohler S390 MICROCLEAN® †
1 percent Vanadium	No P/M Equivalent (Uddeholm Caldie / Unimax)	No P/M Equivalent (Bohler W360)
3 percent Vanadium	Uddeholm Vanadis® 4 Extra SuperClean™ †	—
9 percent Vanadium	—	—
A11	Uddeholm Vanadis® 10 SuperClean™ †	Bohler K294 MICROCLEAN®
High Speed, High Co	Uddeholm Vanadis® 60 SuperClean™	Bohler S290 MICROCLEAN®
440C Stainless	Uddeholm Elmax SuperClean™ †	Bohler M390 MICROCLEAN®
Bridge Alloy	—	Bohler S290 MICROCLEAN®
Anti-Galling Tool Steel	Uddeholm Vancron® 40 †	—

When compared to the competition, the Bohler-Uddeholm Powder Metal Grades manufactured with 3RD Generation PM Technology will have:

- Improved ductility and toughness due to improved internal cleanliness, fewer non-metallic inclusions
- Better chipping and cracking resistance
- Improved dimensional stability in heat treatment

† Item stocked in North America

This information is based on our present state of knowledge and is intended to provide general notes on our products and their uses. It should not therefore be construed as a warranty of specific properties of the products described or a warranty for fitness for a particular purpose. Rev Aug 21, 2008.