

# QUEBEC METAL POWDERS LIMITED

## SPECIFICATION

GRADE:            ATOMET DB46

PROPERTIES	SPECIFICATIONS		METHOD		
	Min.	Max.			
Apparent density, (g/cm <sup>3</sup> )	2,97	3,12	ISO 3923-1		
Flow, (s / 50g)	-----	30	ISO 4490		
<b><u>PARTICLE SIZE ANALYSIS OF STEEL POWDER, (% BY WEIGHT)</u></b>					
	<u>U.S. MESH</u>	<u>MICRONS</u>			
	+60	+250	-----	Trace	ISO 4497
	-60    +100	-250    +150	-----	18,0	ISO 4497
	-325	-45	10,0	30,0	ISO 4497
<b><u>CHEMICAL ANALYSIS OF STEEL POWDER, (% BY WEIGHT)</u></b>					
Carbon		-----	0.010		ASTM E 1019
Oxygen		-----	0.15		ASTM E 1019
Sulphur		-----	0.014		ASTM E 1019
Copper		1,35	1,65		ASTM E 322
Manganese		0.10	0.18		ASTM E 322
Molybdenum		0,45	0,55		ASTM E 322
Nickel		1,58	1,92		ASTM E 322
<b><u>COMPACTING PROPERTIES, (1)</u></b>					
Green density at 600 MPa, (g/cc)		7,00	-----		ISO 3927
Green strength at 7,0 g/cc, (MPa)		9,0	-----		ISO 3995

### NOTES:

(1) Rectangular bars as per MPIF STD # 15. Test mix: Fe - 0.6 C - 0.75 ZnSt.

Spec/EV/general/db46met

Rev.:05

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C. Charest