TECHNICAL DATA SHEET

umicore
Cobalt & Specialty Materials

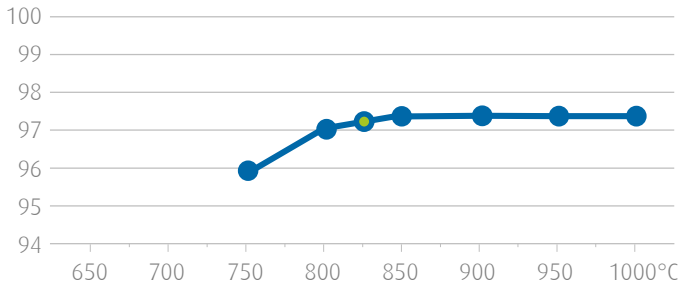
NEXT®300

Base Pre-Alloyed Powder

TYPICAL PHYSICAL AND CHEMICAL DATA

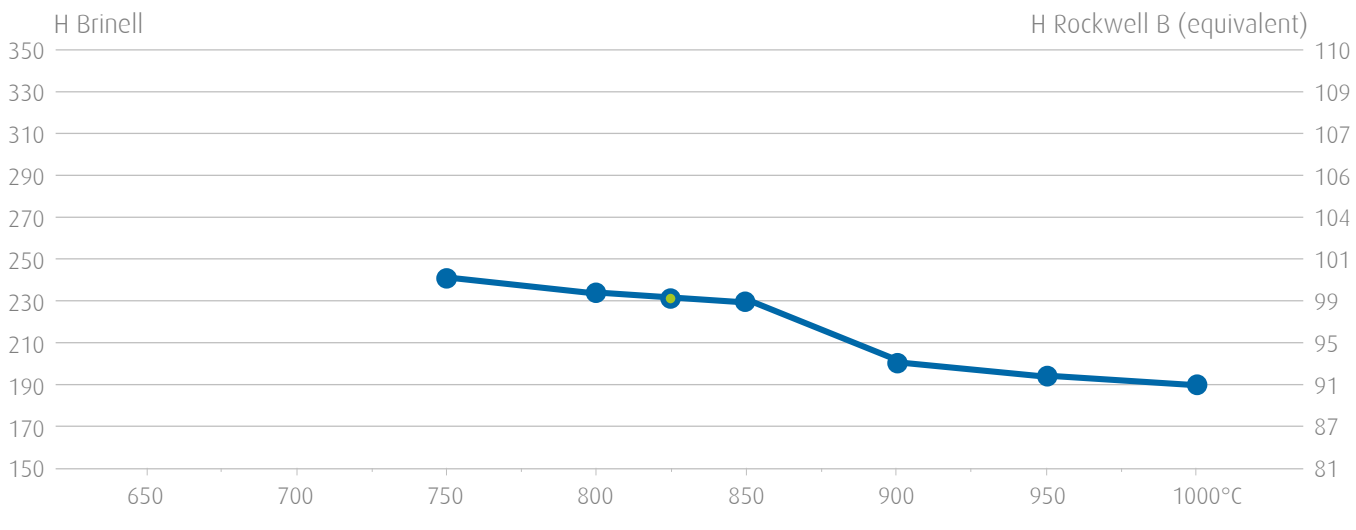
NEXT®300 powder	
Theoretical density *(g/cm³)*	8.12
Scott density *(g/cm³)*	2.2
Tap density *(g/cm³)*	3.2
Oxygen content *(wt %)*	0.4
Fisher gran size *(µm)*	3.8

% RELATIVE DENSITY



SINTERING CONDITIONS	
Minimum sintering temperature	775°C
Recommended sintering temperature	825°C
Pressure	350kg/cm²
Holding time	3 min

HARDNESS



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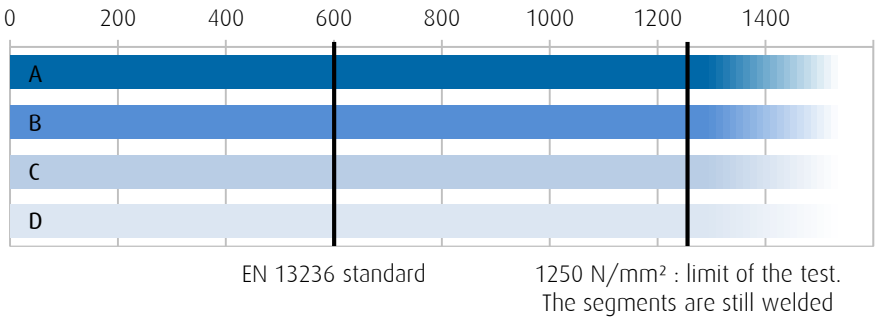
PERFORMANCES AS BACKING

	Bond composition	Sintering temperature
A	80% NEXT®300 + 20% Fe CN **[MX3480]**	800°C
B	70% NEXT®300 + 30% Fe CN	800°C
C	60% NEXT®300 + 40% Fe CN	800°C
D	50% NEXT®300 + 50% Fe CN	800°C

Destructive bending test results (N/mm²)



APPLICATIONS

Backing for laser welding from 775°C

SAFETY & MSDS

Material is packed in aluminized plastic bags under inert atmosphere
Keep bags tightly closed and in a dry area
After opening and to avoid any oxydation, use the desiccant bags placed in the drums for further usage

Review and follow carefully the handling and exposure precautions detailed in the Material Safety Data Sheet (MSDS) or Information Product Sheet (IPS)
For more information, contact toolmaterials@eu.umicore.com