



# Quality Control Protocol

**Material:** HWS® powder

**Recipient:** MDT CO., LTD

**Rovalma's  
reference:** 171402C02001

**Recipient's  
reference:** 17-016-S-0213

**Nr. of delivery note:** 17-01346

**Date of delivery note:** 21/02/2017

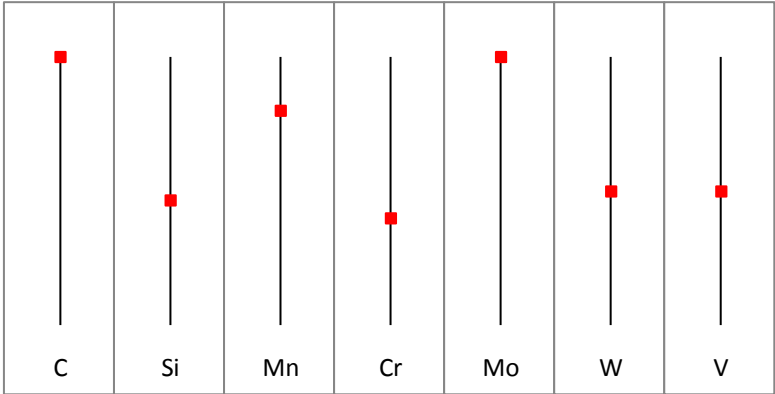
This Quality Control Protocol (henceforth also referred to as "QCP") concerns the material specified on the beginning of this QCP. The values documented in this QCP result from analyses and tests carried out on samples taken from the original material. The herein documented results have been obtained by extraction of random material samples. The properties of the material from other extraction zones of the same may result different due to material heterogeneity, differences in measurement, testing and evaluation methods, test settings of employed test instruments or subsequent processing steps that the material has been subjected to.

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Composition

Instrument Employed: ICP and LECO

- Functional elements:



All elements within specifications: YES

Deviating elements and per cent deviation: NONE

Is deviation critical: Does not apply

Can composition be generally accepted: YES

Can composition be accepted with restrictions: Does not apply

Specify: Does not apply

Comments: Values for each element are normalized in the range

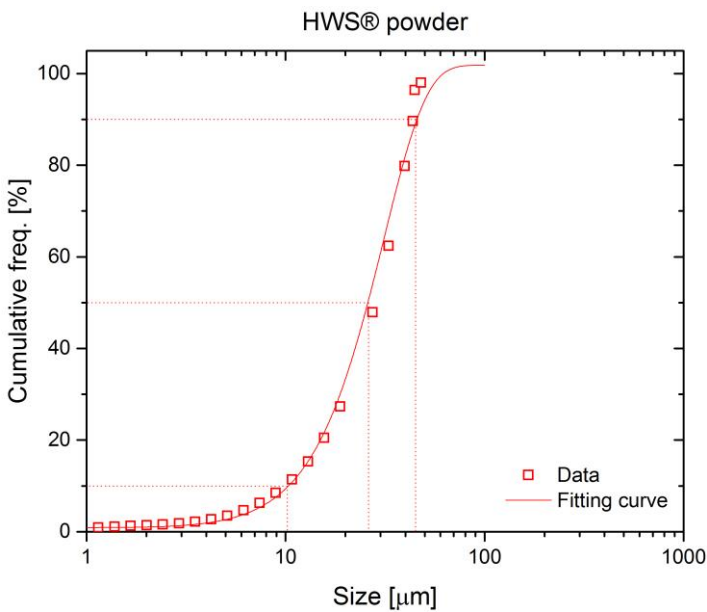
Tap density

Based on Norm:	ISO 3953/ASTM B527-15
Density:	5.5 g/cc
Level is within set range:	YES

Particle size distribution

Based on Norm:	ASTM B822 - 10
Instrument Employed:	Beckman Coulter LS 13 320
Particle size data:	

Size [micron]	Distribution [%]
+45	~3.0
-45	~97.0



Level is within set range:	YES
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