Chemistry

	Mass weight %	C	S	P	Mn	Ni	Cr	Mo
Marshalloy MQ	*Aim*	*0.39*	*0.015*	*<0.010*	*1.25*	*0.35*	*1.15*	*0.24*
	Sample	**0.40**	**0.017**	**0.008**	**1.24**	**0.37**	**1.16**	**0.27**
AISI 4140	Aim	0.43	≤0.040	≤0.035	0.85	-	0.95	0.21
	Sample 1	0.40	0.003	0.014	0.87	0.03	0.86	0.17
	Sample 2	0.39	0.001	0.033	1.13	0.02	0.99	0.18
	Sample 3	0.42	0.001	0.010	0.73	0.22	0.94	0.14

In contrast, AISI 4140 is manufactured by many companies, resulting in chemistry variations and inconsistent performance. (High phosphorous (P) content can make steel brittle!)

	C	S	Mn	Ni	Cr	Mo	V
P20	0.35	**0.005**	0.9	/	1.8	0.38	/
4142 (typical)	0.42	**0.005**	0.8	**/**	**1.1**	**0.2**	0.03
MMQ (guarantee)	0.36/ 0.42	0.010/ 0.025	1.10/ 1.30	0.25/ 0.50	1.00/ 1.20	0.15/ 0.35	/
MMQ (typical)	0.39	**0.015**	1.25	**0.35**	**1.15**	**0.24**	/

- **Better Machinability**
- **Compatible with polishing & texturing**

- **Good hardenability, through thickness consistency**

MARSHALLOY MQ®