SELECTION REPORT

SUMMARY	**Stage Details**

1. SELECTION DATA

Database	Metals plus
Table	MaterialUniverse
Subset	All bulk materials
Reference	

2. SELECTION CRITERIA (SUMMARY)

Stage	Attribute	Constraints
1	Young's modulus (GPa)	≥ 70
	AND Tensile strength (MPa)	≥ 100
	AND Maximum service temperature (°C)	≥ 150
	AND Minimum service temperature (°C)	≤ -50
	AND Magnetic type	Non-magnetic
	AND Metal cold forming	Acceptable
	AND Metal press forming	Acceptable
	AND Water (fresh)	Excellent
	AND Water (salt)	Acceptable, Excellent
	AND Weak acids	Excellent
	AND Strong acids	Excellent
	AND Flammability	Non-flammable
2	Tensile strength (MPa)	
	Density * Price	

3. SELECTION RESULTS

Records passing: All Stages   154 of 3820

Ranked by: Alphabetically

Ranked order: Low to high

1		Aluminum, 2008, T4
2		Aluminum, 2008, T62

SELECTION REPORT

3	Aluminum, 2017, T4
4	Aluminum, 2017, T42
5	Aluminum, 2017, T451
6	Aluminum, 2024, O
7	Aluminum, 2024, T3
8	Aluminum, 2024, T351
9	Aluminum, 2024, T3510/T3511
10	Aluminum, 2024, T36

SELECTION REPORT

PROJECT SELECTION SETTINGS:
Pass records with no data: Off

Fail estimated records: Off

Change number of records to display...   Stage Details

SELECTION REPORT

STAGE 1:	LIMIT	

CONSTRAINTS

Attribute	Constraints
Young's modulus (GPa)	≥ 70
AND Tensile strength (MPa)	≥ 100
AND Maximum service temperature (°C)	≥ 150
AND Minimum service temperature (°C)	≤ -50
AND Magnetic type	Non-magnetic
AND Metal cold forming	Acceptable
AND Metal press forming	Acceptable
AND Water (fresh)	Excellent
AND Water (salt)	Acceptable, Excellent
AND Weak acids	Excellent
AND Strong acids	Excellent
AND Flammability	Non-flammable

STAGE SELECTION SETTINGS:	
Pass when:	Any part of record within selection

Records passing: 154 of 3820

STAGE 2:	DENSITY * PRICE, TENSILE STRENGTH (MPA)	Summary
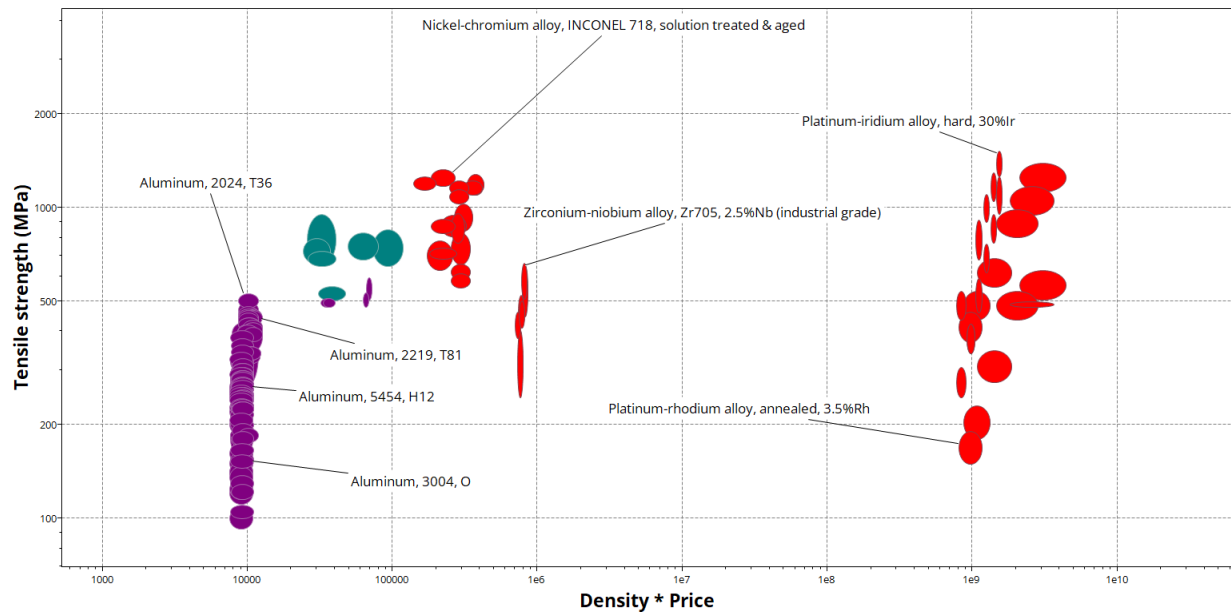
Stage selection settings:
Show results from all enabled stages: On
Pass when: Any part of record within selection

Records passing: 3811 of 3820