Grouping system for steels CR ISO 15608:2000

Group 1:
Steels with a specified minimum yield strength $R_{y} \leq 460$ N/mm$^2$ and with analysis in %: 
- C $\leq 0.25$
- Si $\leq 0.60$
- Mn $\leq 1.70$
- Mo $\leq 0.70$
- S $\leq 0.045$
- P $\leq 0.045$
- Cu $\leq 0.40$
- Ni $\leq 0.5$
- Cr $\leq 0.3$ (0.4 for castings)
- Nb $\leq 0.05$
- V $\leq 0.12$
- Ti $\leq 0.05$

Sub-group:
1.1: Steels with a specified minimum yield strength $R_{y} \leq 275$ N/mm$^2$
1.2 Steels with a specified minimum yield strength $275 < R_{y} \leq 360$ N/mm$^2$
1.3 Normalised fine grain steels with a specified minimum yield strength $R_{y} > 360$ N/mm$^2$
1.4 Steels with improved atmospheric corrosion resistance whose analysis may exceed the requirements for the single elements as indicated under 1

Group 2:
Thermomechanically treated fine grain steels and cast steels with a specified minimum yield strength $R_{y} > 360$ N/mm$^2$

Sub-group:
2.1 Thermomechanically treated fine grain steels and cast steels with a specified minimum yield strength $360 < R_{y} \leq 460$ N/mm$^2$
2.2 Thermomechanically treated fine grain steels and cast steels with a specified minimum yield strength $R_{y} > 460$ N/mm$^2$

Group 3:
Quenched and tempered steels and precipitation hardened steels except stainless steels with a specified minimum yield strength $R_{y} > 360$ N/mm$^2$

Sub-group:
3.1 Quenched and tempered steels with a specified minimum yield strength $360 < R_{y} \leq 690$ N/mm$^2$
3.2 Quenched and tempered steels with a specified minimum yield strength $R_{y} > 690$ N/mm$^2$
3.3 Precipitation hardened steels except stainless steels

Group 4:
Low vanadium alloyed Cr-Mo-(Ni) steels with Mo $\leq 0.7\%$ and V $\leq 0.1\%$

Sub-group:
4.1 Steels with Cr $\leq 0.3\%$ and Ni $\leq 0.7\%$
4.2 Steels with Cr $\leq 0.7\%$ and Ni $\leq 1.5\%$

Group 5:
Cr-Mo steels free of vanadium with C $\leq 0.35\%$

Sub-group:
5.1 Steels with 0.75% $\leq$ Cr $\leq 1.5\%$ and Mo $\leq 0.7\%$
5.2 Steels with 1.5% $<$ Cr $\leq 3.5\%$ and 0.7 < Mo $\leq 1.2\%$
5.3 Steels with 3.5% $<$ Cr $\leq 7.0\%$ and 0.4 < Mo $\leq 0.7\%$
5.4 Steels with 7.0% $<$ Cr $\leq 10\%$ and 0.7 < Mo $\leq 1.2\%$

Group 6:
High vanadium alloyed Cr-Mo-(Ni) steels

Sub-group:
6.1 Steels with 0.3% $\leq$ Cr $\leq 0.75\%$, Mo $\leq 0.7\%$ and V $\leq 0.35\%$
6.2 Steels with 0.75% $<$ Cr $\leq 3.5\%$, 0.7% $<$ Mo $\leq 1.2\%$ and V $\leq 0.35\%$
6.3 Steels with 3.5% $<$ Cr $\leq 7.0\%$, Mo $\leq 0.7\%$ and 0.45% $\leq$ V $\leq 0.55\%$
6.4 Steels with 7.0% $<$ Cr $\leq 12.5\%$, 0.7% $<$ Mo $\leq 1.2\%$ and V $\leq 0.35\%$

Group 7:
Ferritic, martensitic or precipitation hardened stainless steels with C $\leq 0.35\%$ and 10.5% $\leq$ Cr $\leq 30\%$

Sub-group:
7.1 Ferritic stainless steels
7.2 Martensitic stainless steels
7.3 Precipitation hardened stainless steels

Group 8:
Austenitic steels

Sub-group:
8.1 Austenitic stainless steels with Cr $\leq 19\%$
8.2 Austenitic stainless steels with Cr $> 19\%$
8.3 Manganese austenitic stainless steels with 4% $<$ Mn $\leq 12\%$

Group 9:
Nickel alloyed steels with Ni $\leq 10\%$

Sub-group:
9.1 Nickel alloyed steels with Ni $\leq 3\%$
9.2 Nickel alloyed steels with 3% $<$ Ni $\leq 8\%$
9.3 Nickel alloyed steels with 8% $<$ Ni $\leq 10\%$

Group 10:
Austenitic ferritic stainless steels (duplex)

Sub-group:
10.1 Austenitic ferritic stainless steels with Cr $\leq 24\%$
10.2 Austenitic ferritic stainless steels with Cr $> 24\%$
In accordance with the specification of the steel product standards, ReH may be replaced by Rp0.2 or Rt0.5. A higher value is accepted provided that Cr + Mo + Ni + Cu + V ≤ 0.75%. "Free of vanadium" means not deliberately added to the material.