

EN 1090



WELDING
TOGETHER



EN 1090

With effect from 1st July 2014 it is compulsory to comply with new EN1090 standard which, in civil engineering, imposes that all on-site construction welded products must be CE marked as foreseen by CPR 305/2011 (Construction Products Regulation) and by Directive 89/106/EEC.

EN 1090 STANDARD CONSISTS OF 3 PARTS, I.E.

EN 1090-1

defining the requirements for component compliance (CE marking)

EN 1090-2

defining the technical requirements for steel structures

EN 1090-3

defining technical requirements for aluminium structures

EN 1090-2 norm provides that the construction design engineer should also define the job risk level actually called "Execution Class" (EXC): EXC types are classified by an increasing number from 1 to 4, where 4 is to indicate the structure technically more complex.

Here below pls. find the 4 classes together with a few examples, i.e.

EXC 1:

steel structures with strength class up to S275, e.g. agricultural construction such as barns.



EXC 2:

steel structures with strength class up to S700, e.g. civil buildings such as homes and offices from 2 to 15 storeys.



EXC 3:

structures subjected to high degree of stress, e.g. buildings higher than 15 storeys or bridges.



EXC 4:

special structures with extreme degree of resistivity, e.g. road or rail viaducts.



HOW



CAN HELP YOU

CEA has produced a collection of qualifying welding procedures called WPQR (Welding Procedure Qualification Record) from which other welding procedure specification are derived, i.e. the so called WPS (Welding Procedure Specification), which will help CEA customers, who will buy them, to satisfy one of the EN 1090 requirements for the erection of steel constructions according to EXC1 and EXC2 classes.

Supplied WPQR's and WPS's have been released and certified by the German competent authority SLV according to material composition, its thickness, type of joint, welding position, filler material, protective gas and valid for CONVEX and DIGITECH VISION PULSE power sources only.



FAQ - FREQUENTLY ASKED QUESTIONS

Can given WPS be used by any welding equipment?

Yes, but only if the used model is also clearly specified in the supplied WPS chosen to do the job.

Will WPQR's and WPS's enable use of filler material and/or gas of any brand

Yes, provided that used products are supplied with certifications fully matching what prescribed in the given specifications.

Are CEA supplied WPQR and WPS "packages" sufficient to enable the operator to apply CE marking on the manufactured item?

No, they are not. WPQR's and WPS's are just a help, in terms of costs and time, to reach a certification according to EN 1090 norm. Each client will have to comply with his obligations by carrying out the job after employing qualified welders and by granting adequate quality controls of the whole manufacturing process according to what specified by EN 3834. It will be also necessary to carry out a periodic maintenance program of the welding power source being used, by using - as said - certified consumable material, strictly adhering what prescribed in the chosen welding specifications.

LIMITATION OF LIABILITY

1. CEA supplied WPS's and WPQR's will facilitate the qualification of the welding process (point 4 of CE certification). WPQR's, made in cooperation with SLV, are in conformity with current standards for the qualification of WPS's. WPS's supplied by CEA are valid for the execution of steel constructions made according to EXC 1 and EXC 2 above referred, as foreseen by EN 1090-2 standard with related application areas. The use of CEA supplied WPQR /WPS packages will not entitle the user to disregard the additional steps, as prescribed by EN 1090 and by CPR 305/2011, he will have to fully fulfil himself.
2. CEA is not liable in case of improper or poor use of any WPS, of any incorrect utilization of CEA power sources, of any mismatch between the welding equipment prescribed in WPQR and WPS and the one wrongly used during the welding process, of any mistake made by the user in the execution of WPQR/WPS and of the utilization of non-qualified personnel during the welding job.
3. It must be clear that only the user, manufacturing the welded structure, will be responsible for the correct application of CEA supplied WPS's and of the full compliance of that herein specified..
4. The user is fully liable and responsible for the CE marking for the finished manufactured product.
5. By purchasing CEA WPS's the buyer accepts all that is contained within this document.

