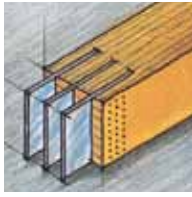


Produce multiple-shear steel-timber joints more easily and economically using the WS system





WS fastening system from SFS intec: easier and faster. That's convincing!

Boost value added with little effort

You can assemble high-quality steel-timber joints using the WS System. Low equipment costs make the new WS System a very interesting prospect even for small and medium-sized businesses.

Convincingly simple system produces durable quality

The WS System is a self-drilling dowel system for multi-profile steel-timber joints. The WS self-drilling dowel, the CF-WS/M manual setting tool or the CF-WS/P setting frame, together with the basic design calculation data, are the component parts of the new jointing system.

The dowels are inserted in the timber and through the steel plates in a single, time-saving operation without pilot drilling. Up to 3 steel plates, each up to 5 mm thick, can be penetrated.

The rear surface of the timber is not penetrated.

Greater cost-effectiveness due to shorter working process.

Producing joints for framework structures has been a complicated process to date.

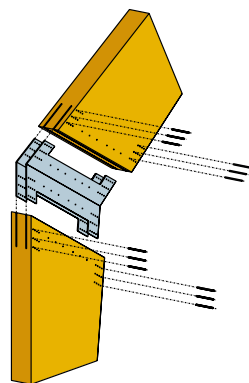
The new WS System reduces the procedure to a few operating steps:

1. fitting the steel plate
2. aligning and fixing it in position
3. inserting the dowel

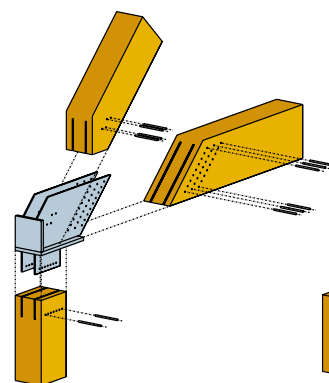
✓ **Advantage:** form-fitting direct fastening results in maximum fitting accuracy!

- pilot drilling in timber
- pilot drilling in steel
- touching up

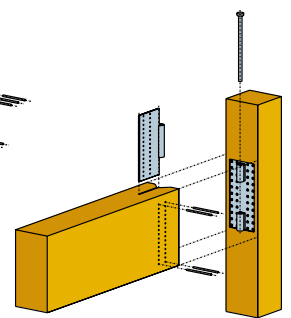
eliminated!



Frame corner



Supporting joint



Post and rail joint



Free-hand installation possible

For horizontal joints the WS self-drilling dowels can also be inserted on-site.

User-friendly, speedy operation using the CF-WS/P setting frame

The pneumatic power-assisted CF-WS/P setting frame is especially suitable for more extensive, large-scale applications.

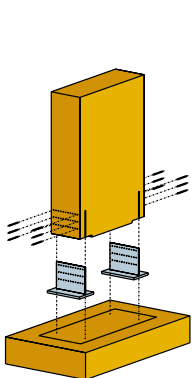
Depending on joint size, it can be used to insert up to 150 WS dowels per hour.

The dowels are usually inserted flush or slightly countersunk. However, by means of the depth stop the dowels can also easily be set so that they protrude uniformly or set deeper (fireproof covering).

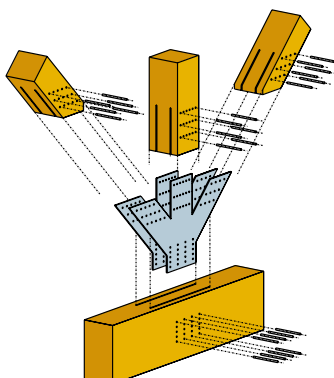


Work easily and flexibly with the CF-WS/M manual setting tool

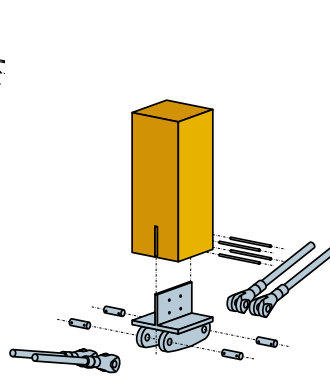
In small-scale applications the WS self-drilling dowels from SFS intec are inserted securely and efficiently using the CF-WS/M manual setting tool. The powerful drive unit with dowel guidance enables work to be performed flexibly in prefabrication operations and on the construction site.



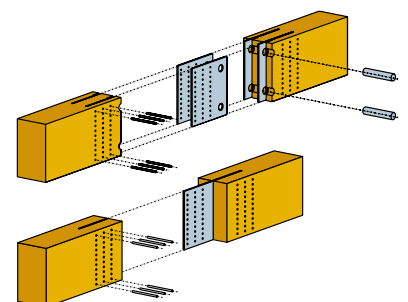
Fixed column base plate



Framework joint



Trussing



Assembly joint/Repairs

WS fastening system: enhanced efficiency in structural timberwork. The ideal solution!



CF-WS/P setting frame



CF-WS/M manual setting tool



In order to ensure optimum system security we recommend using exclusively WS setting tools. In manual setting, special attention must be paid to inserting the WS dowel at right-angles.

WS-T self-drilling dowel

A socket drive
T40

B Underhead
thread

C Shank section

D Drill point

WS-T-7 x L fastener range

Type	Material T = Carbon steel	Diameter in mm	Length in mm	Timber width in mm	Number of steel plates 5 mm thick
WS	- T	7	x 73	80	1
WS	- T	7	x 93	100	1
WS	- T	7	x 113	120	1
WS	- T	7	x 133	140	2
WS	- T	7	x 153	160	2
WS	- T	7	x 173	180	3
WS	- T	7	x 193	200	3
WS	- T	7	x 213	220	3
WS	- T	7	x 233	240	3

Max. penetration thickness: 3 x 5 mm or 1 x 10 mm steel plate in S 235 / St 37 / FeE 235 quality. Higher steel strengths can result in failures during insertion in the absence of additional measures and should therefore only be used after consultation with us.

If you have any further questions about the WS System from SFS intec or our extensive range of fastening systems, just phone us.