

Handicapped People in Fasteners Production, Logistic and Assembly

by Jozef Dominik

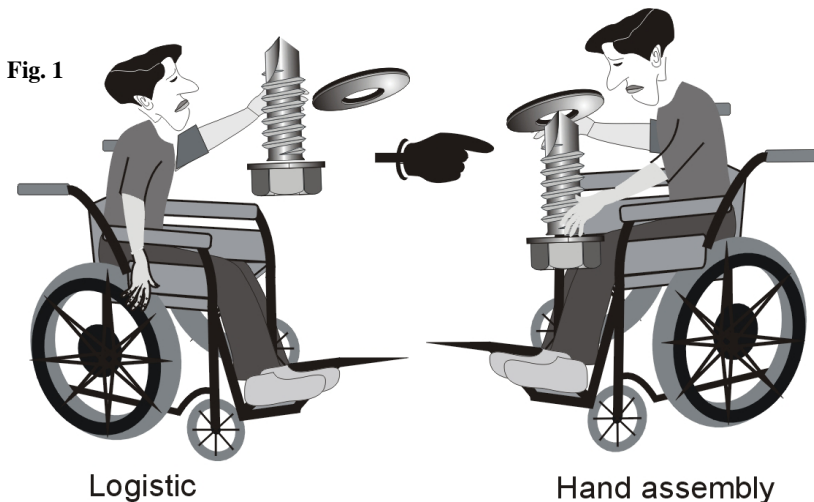
Preface

Disability is a large population problem and is growing year to year. According to Building Accessibility Handbook 2020, in 2017 more than 926,000 British Columbians aged 15 and older, nearly 25 percent of population, were identified as having a disability. In other countries, these statistics may be different. One fifth of the EU population for example is expected to have some form of disability. It is not only a moral but also a legal obligation of an advanced society to remove the physical and mental barriers for these unfortunate people and to provide them with opportunities for employment in normal social life. This follows the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD).

Physically handicapped people have an immense appetite for life. Perhaps the most famous representative of the immense willpower was the English physicist Stephen William Hawking (*1942 - †2018). Although severely disabled and strapped to a wheelchair using special software Equalizer and EZKeys, he was able to be active. His statement is famous:

"No matter how bad life is, there is always something you can do and succeed. As long as there is life, there is hope."

What people with disabilities need from society the least, is sympathy. They need to integrate normally into social events as an equal partner. As said by Rochus Wellenbrock, CEO of the Wewole FOUNDATION: "People with disabilities have a legal right to live and work independently". The fastener industry and businesses also provide a good opportunity to do so.



So What are the Options in This Branch?

A characteristic feature of the fastener industry is serial to mass production in automatic production lines. This system requires a geometrically oriented transport of parts to the assembly point. However, the automatic vibrating feeder does not always fulfill such this function or it would be very complicated and expensive. **Fig. 1** shows an example of a possible application for the physically handicapped mounting a rubberized washers on a self-drilling screw. This operation can also be performed by the blind. The 30-year old blind man did not make a single mistake out of the 1000 monitored assembly operations, so he did not put any washer in the opposite side.

It is similar for example with the correctly oriented mounting of a plastic ring on the IstLock® locking nuts (**Fig. 2**). Unlike the case above, a blind 30-year-old man made frequent mistakes. This only confirms that automatic orientation would be very difficult, even with the current state of the art nearly impossible.

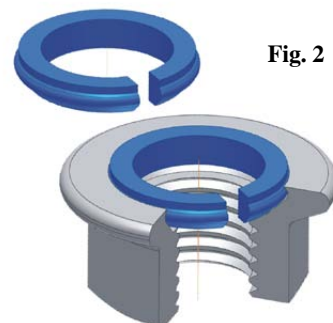




Fig. 3

These examples are just a small choice of the possible application of the disabled in the production process. It is much more common for these people to be employed in the domain of mental activity, e.g. as designers (Fig.3).

Another activity that can be equally performed by a physically challenged is working in a laboratory (Fig. 4). He can sit in his wheelchair or move to a classic work chair. The advantage of a wheelchair is the possibility of free movement, e.g. from hardness tester to metallographic microscope and the like. Communication routes without obstacles are important.

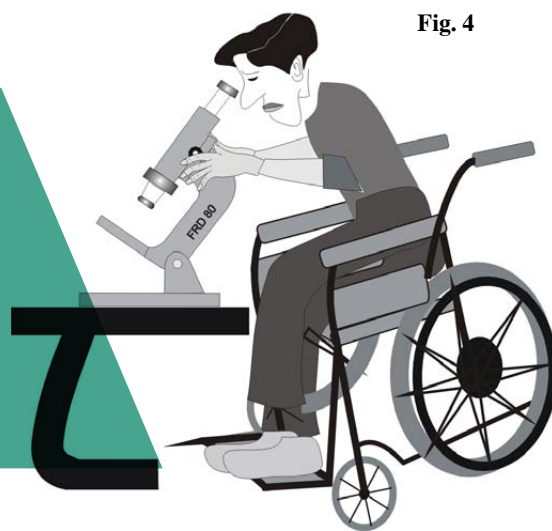


Fig. 4

Of course, these people also require specific working conditions. They must have access to all services and facilities as others. It is not just barrier-free access. In 1993 the United Nations adopted the important document: “Rules on the Equalization of Opportunities for Persons with Disabilities” (UNSR). This Standard Rules represent a strong moral and political commitment of governments to take action to achieve equalization of opportunities for persons with disabilities.

Conclusion

The physically challenged live among us and need our help. All they need from society is to create the conditions and opportunities for them to live a normal life. Then they can feed themselves and then they are happy. Jozef Metelka, the world-famous Paralympic multiple winner in cycling, said it for everyone: “How lucky the doctors were not to save my leg”.

It is gratifying that the fasteners industry is also able to create conditions for the employment of the physically handicapped. The article lists only a fraction of the options where they could apply. On behalf of my friend J. L., who has been confined to a wheelchair for a long time, I would like to thank you very much. ■

