

Technical Guide on “Standardized Work”



**Small and Medium Enterprises Development Authority
Ministry of Industries & Production
Government of Pakistan**

www.smeda.org.pk

**Prepared By
INDUSTRY SUPPORT CELL
(SINDH OFFICE)**

05th Floor, Bahria Complex # 2, M.T. Khan Road, Karachi
Tel:(92 21)111 111 456, Fax:(92 42) 35610572

REGIONAL OFFICE PUNJAB	REGIONAL OFFICE SINDH	REGIONAL OFFICE KPK	REGIONAL BALOCHISTAN	OFFICE
3 rd Floor, Building No. 3, Aiwan-e-Iqbal Complex, Egerton Road Lahore, Tel: (042) 111-111-456 Fax: (042) 36304926-7 helpdesk.punjab@smeda.org.pk	5 TH Floor, Bahria Complex II, M.T. Khan Road, Karachi. Tel: (021) 111-111-456 Fax: (021) 5610572 helpdesk-khi@smeda.org.pk	Ground Floor State Life Building The Mall, Peshawar. Tel: (091) 9213046-47 Fax: (091) 286908 helpdesk-pew@smeda.org.pk	Bungalow No. 15-A Chaman Housing Scheme Airport Road, Quetta. Tel: (081) 831623, 831702 Fax: (081) 831922 helpdesk-qta@smeda.org.pk	

June 2023

Table of Contents

1.	DISCLAIMER:	3
1.1	INTRODUCTION TO SMEDA:	3
1.2	INDUSTRY SUPPORT PROGRAM	3
2.	WHAT IS STANDARDIZED WORK?	5
2.1	ELEMENTS OF STANDARDIZED WORK:	5
3.	WHEN TO USE STANDARDIZED WORK?	6
4.	HOW STANDARDIZED WORK CAN BENEFIT YOUR BUSINESS?	6
5.	HOW TO SUCCESSFULLY CREATE STANDARDIZED WORK?	7

1. Disclaimer:

This information memorandum is to introduce the subject matter and provide a general idea and information on the said matter. Although, the material included in this document is based on data/information gathered from various reliable sources; however, it is based upon certain assumptions, which may differ from case to case. The information has been provided on AS IS WHERE IS basis without any warranties or assertions as to the correctness or soundness thereof. Although, due care and diligence has been taken to compile this document, the contained information may vary due to any change in any of the concerned factors, and the actual results may differ substantially from the presented information. SMEDA, its employees or agents do not assume any liability for any financial or other loss resulting from this memorandum in consequence of undertaking this activity. The contained information does not preclude any further professional advice. The prospective user of this memorandum is encouraged to carry out additional diligence and gather any information which is necessary for making an informed decision; including taking professional advice from a qualified consultant/technical expert before taking any decision to act upon the information.

1.1 Introduction to SMEDA:

The Small and Medium Enterprises Development Authority (SMEDA) was established in October 1998 with an objective to provide fresh impetus to the economy through development of Small and Medium Enterprises (SMEs).

With a mission "to assist in Employment Generation and Value Addition to the national income, through development of SME sectors, by helping increase the number, scale and competitiveness of SMEs", SMEDA has carried out 'sectoral research' to identify Policy, Access to Finance, Business Development Services, strategic initiatives and institutional collaboration & networking initiatives.

Preparation and dissemination of prefeasibility studies in key areas of investment has been a successful hallmark of SME facilitation by SMEDA.

Concurrent to the prefeasibility studies, a broad spectrum of Business Development Services is also offered to the SMEs by SMEDA. These services include identification of experts and consultants and delivery of need-based capacity building programs of different types in addition to business guidance through help desk services.

For more information on services offered by SMEDA, please contact our website: www.smeda.org

1.2 Industry Support Program

In order to enhance competitiveness of SMEs and achieve operational excellence, SMEDA established an Industry Support Cell (ISC) for provision of foreign technical support and knowledge transfer in collaboration with International Development Organizations. SMEDA's Industry Support Program (ISP) initially launched with Japan International Cooperation Agency (JICA) and actively engaged in reducing energy inefficiencies and

improving production and quality of products with the support of Japanese Experts. Later on, similar activities with other international partner organizations like German Corporation for International Cooperation (GIZ), Training and Development Centers of the Bavarian Employers' Association (bfz), Germany, and United Nations Industrial Development Organization (UNIDO) were also successfully implemented.

2. What is Standardized Work?

Standardized work is a Lean manufacturing concept. It is defined as the noting of the current best way of doing tasks and making it standard. Target is to make most efficient work flow considering safety, quality, delivery and cost based on available resources. The focus here is on eliminating dirty, dangerous and difficult tasks from the work flow.

Keep in mind that standardized work is not fixed i.e. once standardized work processes developed we will not leave them to remain fix forever. Rather, standardized work is part of a continual improvement cycle. This means that we have to continuously look for better ways to perform tasks and continuously improve standards.

2.1 Elements of Standardized Work

Standardized work processes development demands three variables:

- Takt time
- Work sequence
- Standard Inventory

Below we explain each of them briefly.

2.1.1 Takt time

It is defined as the time at which we need to complete product or service in order to satisfy customer demand. Takt Time is calculated by using following formula:

$$\text{Takt Time} = \frac{\text{Net Available Time per Day}}{\text{Customer Demand per Day}}$$

The takt time calculation sets the rate for meeting customer schedule; this also prevents waste of overproduction. Organizations use takt time to set workloads, simplify processes, and design layouts that maximize efficiency.

2.1.2 Work Sequence

It is defined as the accurate number of steps an operator performs every time to make sure products are delivered within takt time. Work sequence enables different workers to perform the same job in a similar way.

2.1.3 Standard Inventory

It is defined as the minimum quantity of raw material, work in process and partially assembled parts required to continue operations running smoothly.

3. When to Use Standardized Work?

Standardized work concepts were initially proposed for the manufacturing industry but it can be customized to almost any environment. Normally we use standardized work where we have:

1. **Repetitive Tasks:** If your work tasks are repetitive in nature and follow regular scheduling use standardized work.
2. **Consistency is Vital:** Does it matter if all does a work the similar manner? In several situations, the response will be affirmative. If so, standardized work will undoubtedly be best.
3. **Continual Improvement:** Use standardized work to resolve the dirty, dangerous and difficulties from the work. In order to resolve the problem, you need to understand the problem first, identify the root causes and then propose improvement. In this way your business will benefit as well by reducing the cost, time and improving quality etc. and it will allow you to document the most efficient work flow considering safety, quality, delivery and cost based on available resources.
4. **Manufacturing Environment:** Industries need appropriate work instructions to control their procedures. These instructions must show in a standardized work instruction sheet that's displayed at each workstation.
5. **Service Processes:** In service industry, standardized work denotes the most efficient method of doing consistent services. Target here is to deliver high-quality services at the lowest cost from each worker. Incorporate standardized work in your daily jobs by utilizing standard operating procedures (SOPs).

4. How Standardized Work Can Benefit Your Business?

Standardized work is a must for operational excellence. It allows an organization to carry out quality work and recommend the best products and services at the lowest cost.

Some of the benefits of standardized work are as follows:

1. **Reduces variability:** Variability increases the chances of rise in safety issues, reduced quality, high cost and failure to meet delivery timelines. By standardizing the current best way to do tasks, standardized work lowers deviations in the output. Work becomes routine like: quality, costs, required inventory, and delivery times can be predicted.
2. **Reduce operational cost:** In competitive environment high cost of doing business can severely impact business profitability. Standardized work by defining the same standards both between the manufacturer and its customer can support minimize trial and error and lowering production costs considerably.
3. **Continuous improvement:** Continuous improvement is a never ending journey in lean manufacturing. Standardized work provides the basis for it. Practically if current standards are documented and implemented it is then possible to evaluate the problems in it and improve. The new standards developed in this way becomes the basis for future improvements and the cycle goes on.

4. **Waste reduction:** Waste is defined as all those activities for which the customer is not willing to pay for. When workers perform their jobs using their own way instead of defined current standard the results are waste generation and failing to achieve business targets. By using standardized work, the waste becomes visible and by following specific steps one can avoid generating waste.
5. **Improved Customer Satisfaction:** Customers are the key to business success. Business must meet and exceed their satisfaction for success. Standardized work helps handling customer queries or concerns by using customized responses and increase personalization. It also helps to ensure that each client gets the same quality responses. This will help meet customer expectations by resolving their concerns.

5. How to Successfully Create Standardized Work?

To successfully design standardized work, use the following steps:

1. **Gather data about existing processes:** Step # 1 is to observe and record current factors like work responsibilities, inventory, output, costs etc. This exercise will help you determine aspects like work sequence and Takt time etc.
2. **Notice variations and issues:** Step # 2 is to observe issues in productivity, quality, safety and other problems disturbing your existing procedures as the source for your improvements. For example, observe whether there are employees who do the similar jobs with variable production output or jobs that could be combined.
3. **Find the most efficient way to run your operations: The Standardized Work:** Step # 3 is to optimize the current practices and work sequence etc. by using different improvement tools like value stream mapping (VSM) and Poka Yoke Etc. Task here is to identify non value added activities and error proof your processes etc.
4. **Document Everything:** Step # 4 is to document all guidelines in a standardized work document in simple format. This will help workers to follow step by step instructions according to the current best practices as outlined in the document.
5. **Train Everyone:** Step # 5 is to train your employees on how to implement the new standards. Existing employees will require re-training too and the new hiring training material needs to be updated now on the new standardized work.
6. **Continuously improve the standard:** Step # 6 is to understand clearly that the standardized work is not a one-time improvement activity. It denotes the present best practice that must be questioned on a daily basis with Kaizen i.e. continuous improvement for further improvement. Once standardized work is executed, it is very easy to identify deviations and problems. It is recommended to perform root-cause analysis for every problem that observe and improve standard that solves the problem.