

# PRODUCTION AND GENERAL ENGINEERING DEPARTMENT (PGD)

## **Minutes**

Meeting and committee   DATE &		TIME	VENUE
	DAY		
Eighth Meeting of	09 November	02:30	Hybrid Meeting,
Conveyor Belts Sectional	2023	pm	BIS, HQ, Manak
Committee, PGD 40	(Thursday)		Bhawan, New Delhi

Meeting link:	https://bismanak.webex.com/bismanak/j.php?MTID=md68800a 9ec940de0cae335d7eebaf37d
Meeting number:	2510 610 7909
Password:	15122023

- **1. CHAIRMAN:** Shri Apurba Ghosh, AGM & HOD (Engg.), Coal Mining Headquarter-Ranchi, NTPC Limited
- 2. MEMBER SECRETARY: Shri Vichitra Vir Singh, Scientist-'D', BIS

Mer	nbers Present		
	Organisation	Name	Attendee Email
3	NTPC Limited, New Delhi	Shri Abhijit Nag	abhijitnag100@gmail.com
4	Directorate General of Mines Safety, Dhanbad	Shri D B Naik	dbnaik74@gmail.com
5	International Conveyors Limited, Aurangabad	Shri U D Dound	uddound@gmail.com
6	Fenner Conveyor Belting Private Limited, Madurai	Shri Vivek M	m.vivek@fenner.com
7	Fenner Conveyor Belting Private Limited, Madurai	Shri Santosh Kosarkar	santosh.kosarkar@fenner.com
8	International Conveyors Limited, Aurangabad	Shri Pinaki Sen	pinakisen@iclbelting.com
9	International Conveyors Limited, Aurangabad	Shri Sudeep Saha	sudeepsaha@iclbelting.com
10	Oriental Rubber Industries Private Limited, Pune	Shri Vikram Makar	vikram@orientalrubber.com
11	Oriental Rubber Industries Private Limited, Pune	Shri Chinmoy Ray	cray@orientalrubber.com
12	NTPC Limited, New Delhi	Shri Vivek Kumar Upadhyay	vivek.ksvnit@gmail.com
13	Forech India Limited, Sonipat	Shri I K Bahl	ikb@forech.com
14	In personal Capacity	Shri Eugene paccelli	eugenepaccelli@gmail.com
15	In personal Capacity	Shri KKS Sinha	kesharisinha@gmail.com

#### ITEM 0 GENERAL

## 0.1 Welcome Address by the Member Secretary

Shri Vichitra Vir Singh, Scientist-D & Member Secretary welcomed all the members of the Committee and invitees who devoted their time to the meeting. He briefed all the members about the main agenda points for the meeting. He also informed about the recent decisions of the Bureau regarding small R&D projects and terms of reference (TOR) for carrying out small R&D for review/ revision of the Standards. He also requested the members to login into the BIS portal and get themselves acquainted with the BIS portal because in the coming days all the communication will be through the portal. He further emphasized that we should also be proactive in finding the right stakeholders to deliberate in formulation of the standards.

He also impressed upon members to be proactive in the committee work so that new subjects for standards formulation can be taken up. He thanked all the members for sparing their valuable time and presence in the meeting. He wished the members for a deliberative and fruitful meeting.

### 0.2 Opening remarks by the Chairman of the Committee

Shri Apurba Ghosh, AGM & HOD (Engg.), Coal Mining Headquarter-Ranchi, NTPC Limited, expressed his warm welcome and greetings to all the members present in the meeting and thanked the members for sparing time for attending the meeting and for their contributions and co-operations in the Committee work. He expressed his concern and desired that more stake-holders should be co-opted in the composition of the Committee. He shared his vast experience in the field of conveyor Belts. He motivated the Committee members for speeding up the long-pending review/revision of the Standards. He suggested increasing the frequency of follow-up meetings/ con call meetings for expediting the pending Committee work. He concluded by wishing the Committee for a deliberative and fruitful meeting.

### ITEM 1 CONFIRMATION OF MINUTES OF LAST MEETING

The minutes of the 7<sup>th</sup> meeting of Conveyor Belts Sectional Committee, PGD 40 was held on 25.07.2023 at Manak Bhawan, BIS New Delhi-110002 through video conferencing [WebEx] were circulated on 14.08.2023. Since no comments had been received.

The Committee formally confirmed the minutes of the last meeting.

### ITEM 2 REFORMS IN THE PROCESS OF STANDARDISATION

Committee has noted the information given at Agenda Item 2 and the committee

is working as per the process reforms suggested by DG BIS.

## ITEM 3 SUMMARY OF ACTIONS TAKEN

The Committee deliberated on the summary of actions taken on the minutes of the last meeting of Conveyor Belts Sectional Committee, PGD 40 and decided as given below:

SL	DECISION OF THE	ACTIONS/	<b>DECISION</b> OF
.N	COMMITTEE/ ACTIONS	STATUS	THE
O	TO BE TAKEN		COMMITTEE
1.	Revision of IS 13775(Part 1):1993 Conveyor belting - Solid woven cotton/synthetic impregnated and unimpregnated - Specification: Part 1 aeroslide belting for air gravity conveyor Shri Santosh Kosarkar, Fenner Conveyor Belting Private Limited, Madurai had volunteered to provide the draft within 2 months to the Member Secretary for circulation to the Committee.	Draft yet to be received. Committee may please deliberate for further actions.	The Committee noted that no comments were received on wide circulation draft IS 13775 Part 1. The committee finalised the draft for printing.
2.	Revision of IS 1891 (Part 4): 1978 Specification for rubber conveyor and elevator belting Part 4 hygienic belting First Revision  The Committee decided to send IS 1891 (Part 4): 1978 Specification for rubber conveyor and elevator belting Part 4 hygienic belting First Revision for wide circulation for 2 months.	The draft is under process for Wide Consultations.	The Committee noted that no comments were received on wide circulation draft IS 1891 Part 4. The committee finalised the draft for printing.
3.	Revision of IS 1891 (Part 2): 1993 Conveyor and elevator textile belting - Specification Part 2 heat resistant belting Third Revision	Draft received from Mr. Chinmay Ray. Committee may please	The revised draft has been sent for wide circulation.

	Shri Chinmoy Ray from Oriental Rubber Industries	deliberate for further actions.	
	Private Limited, Pune had	rurtiner actions.	
	volunteered to take up the		
	revision of IS 1891 (Part 2):		
	1993 Conveyor and elevator		
	textile belting - Specification		
	Part 2 heat resistant belting		
	Third Revision and will provide		
	his input/comments within 1		
4.	month to Member Secretary.  Revision of IS 1891 (Part 3):	Draft yet to be	Committee
7.	1988 Specification for rubber	received.	decided to follow
	conveyor and elevator textile	Committee may	
	belting Part 3 oil resistant	please	up for the draft IS
	belting Second Revision	deliberate for	1891 (Part 3): 1988 to Shri
	Dr. Sugata Chakraborty from	further actions.	
	Phoenix Conveyor Belt India		Sugata Chalanah antu fuana
	Private Limited, Kolkata had		Chakraborty from
	volunteered to take up the		Phoenix
	revision of IS 1891 (Part 3):		Conveyor Belt
	1988 Specification for rubber		India Private
	conveyor and elevator textile		Limited, Kolkata.
	belting Part 3 oil resistant		
	belting and will provide his		
	input/comments within 1 month		
_	to Member Secretary.	TD 0: 1	TD1 1 1 0
5.	Revision of IS 1891 (Part 5):	Draft received	The revised draft
	1993 Conveyor and elevator	from Mr.	has been sent for
	textile belting - Specification  Part 5 fire resistant belting for	Chinmay Ray.	wide circulation.
	Part 5 fire resistant belting for surface application	Committee may please	
	Shri Chinmoy Ray from	deliberate for	
	Oriental Rubber Industries	further actions.	
	Private Limited, Pune had	ratiner actions.	
	volunteered to take up the		
	revision of IS 1891 (Part 5):		
	1993 Conveyor and elevator		
	textile belting - Specification		
	Part 5 fire resistant belting for		
	surface application and will		
	provide his input/comments		

	within 1 month to Member		
	Secretary.		
6.	The Committee formed another sub-committee to revise IS 3181 including the members as below. This Committee shall revise the draft deliberating on the comments from Shri Chinmoy Ray and international specifications into consideration. Composition of sub-committee as given below:  1. Shri Ajoy Kumar Singh (Coal India Ltd) (Convener)  2. Shri Arumugam Mookiah (DGMS)  3. Dr. K. Rajkumar (Dir. IRMRA)/Mrs. Suchismita Sahoo (IRMRA)  4. Shri Vikram Makar (Oriental Rubber)/Shri Chinmoy Ray (Oriental Rubber)  5. Shri Eugene Pacelli (In personal Capacity)  6. Shri Santosh Kosarkar, Fenner Conveyor Belting Pvt. Ltd., Madurai  Shri Eugene paccelli had beautifully made a presentation and explained the draft IS 3181 (Part1) to all the Committee members and to Shri D B Naik, DDG, Directorate General of Mines Safety, Dhanbad. He had in principle given his consent and suggested for involving other stakeholders attached with DGMS. He requested for physical meetings of this kind so that more information would be disseminated to all the	Drafts received from Shri Eugene paccelli and Mr. Chinmay Ray, the same was circulated to the Committee. Committee may please deliberate for further actions.  Webinar has been scheduled on 27th March 2023 for awareness and sensitization of all the stakeholders of IS 3181, specially the DGMS stakeholders.	The revised draft has been sent for wide circulation. Shri D B Naik, DDG, Directorate General of Mines Safety, Dhanbad has volunteered to organize a stakeholder meeting at Dhanbad on 19 December 2023 for discussions on the draft IS 3181.

7.	provide the draft after incorporating IS 3181 (Part 2) in the IS 3181 (Part 1), to the member secretary within 1 month for circulation to the Committee.  Shri D B Naik, DDG, Directorate General of Mines Safety, Dhanbad had volunteered to host/organise an stakeholders meeting in Kolkata in January 2023 in which expert members will take part and through discussions/ deliberations will be held with stakeholders of IS 3181.  Subcommittee will fine tune the draft before the meeting and will submit it to MS. Committee agreed to the above proposal as this standard is very important for underground mines safety.  Revision of IS 9405: 1980 ISO	The revised	The Committee
,,	1120: 1972 Method of test for conveyor belt fasteners Shri Eugene paccelli had volunteered to take up revision of IS 9405: 1980 ISO 1120: 1972 Method of test for conveyor belt fasteners and will provide his input/comments within 1 month to the Member Secretary.  [Status of Base Standard ISO 1120: 2012]	draft has been sent for wide circulation on 08-11-2023. The last date for sending comments on the draft is 04-01-2024.	noted that no comments were received on the wide circulation draft IS 9405/ISO 1120.  The committee finalised the draft for printing.

8.	Revision of IS 17071/ISO 252 Conveyor Belts Adhesion Between Constitutive Elements Test Methods	The revised draft has been sent for wide circulation on 05-09-2023. The last date for sending comments on the draft is 31-10-2023.	The Committee noted that no comments were received on the wide circulation draft IS 17071/ISO 252. The committee finalised the draft for printing.
9.	Revision of IS 16851/ISO 583 Conveyor Belts With a Textile Carcass Total Belt Thickness and Thickness of Constitutive Elements Test Methods	The revised draft has been sent for wide circulation on 28-08-2023. The last date for sending comments on the draft is 24-10-2023.	The Committee noted that no comments were received on the wide circulation draft IS 16851/ISO 583. The committee finalised the draft for printing.

# ITEM 4 REVIEW/REAFFIRMATION AND REVISION OF PUBLISHED INDIAN STANDARDS

### 4.1 STANDARDS DUE FOR REVIEW/REAFFIRMATION:

The Committee noted the information given at agenda Item no. 4.1. Committee has reaffirmed the following standards:

Sr.	IS Number	IS Title	Last	Due	Status
No			Reaf	Date	
•			firm		
			ation		
			Year		
1.	IS 16758:	Conveyor belts - Determination of	0	Septem	Reviewed In:
	2018	minimum pulley diameter		ber,	2018
	ISO 3684	•		2023	

2.	IS 16851: 2018 iso 583: 2007	Conveyor Belts With a Textile Carcass â€" Total Belt Thickness and Thickness of Constitutive Elements â€" Test Methods	0	Septem ber, 2023	Reviewed In: 2018
3.	IS 17056: 2019 ISO 282: 1992	Conveyor Belts â€" Sampling	0	March, 2024	Reviewed In: 2018
4.	IS 17071: 2019 ISO 252	Conveyor Belts â€" Adhesion Between Constitutive Elements â€" Test Methods	0	March, 2024	Reviewed In: 2018
5.	IS 17089: 2019 ISO 433: 2017	Conveyor Belts â€" Markings	0	March, 2024	Reviewed In: 2018
6.	IS 17090: 2019 ISO 703: 2017	Conveyor belts - Transverse flexibility (Troughability) - Test method	0	March, 2024	Reviewed In: 2018
7.	IS 17114: 2019 ISO 251	Conveyor belts with textile carcass - Widths and lengths	0	March, 2024	Reviewed In: 2018.

## Committee has decided to withdrawal of the following Standards:

These standards were covered in the IS 1891 series.

Sr. No	IS Number	IS Title	Last Reaf firm ation Year	Due Date	Status
1.	IS 16756: 2018 ISO 10247: 1990	Conveyor Belts - Characteristics of Covers - Classification	2023	,	Reviewed In : 2018
2.	IS 16765 : 2019 ISO	Conveyor belts - Specification for rubber - Or plastics - Covered	0	,	Reviewed In : 2018

14890-2013	conveyor belts of textile		
	construction for general use		

#### 4.2 REVISION OF INDIAN STANDARDS PUBLISHED BEFORE 2000

The Committee noted the information given at agenda Item no. 4.2.

### ITEM 5 PROGRAMME OF WORK

- **5.1** The committee noted the present programme of work of Conveyor Belts Sectional Committee, PGD 40 as given in **Annex-2** of the Agenda.
- **5.2** The Committee noted the information given at agenda Item no. 5.2.

#### ITEM 6 COMPOSITION OF THE SECTIONAL COMMITTEE

- **6.1** The committee noted the present composition of the Conveyor Belts Sectional Committee, PGD 40 is given in **Annex-1** of the Agenda.
- **6.2** The committee deliberated and decided to co-opt the active and relevant expert members and withdraw the co-option of the inactive organizations/members from the committee composition.

## Committee decided to co-opt the following organizations:

Sl	Organization	Name	Email
No.			
1.	Directorate General of	Kaushik Sengupta	ddmsmech.hq@g
	Mines Safety, Dhanbad	Dy. Director	mail.com
	Central		
2.	NTPC, Hyderabad	Shri Vivek Kumar	vivekkumarupadhy
		Upadhyay	ay@ntpc.co.in

## **6.3** Committee decided to Withdrawal the Co-option of the following:

Sl	Organization	Name	Email
No.			

1.	Contitech India Pvt. Ltd. , New Delhi	Shri Subrata Ray Shri J.P.S. Raghav, 011306452676	Rajiv.Gupta@ptg.contite ch.in, Subrata.Ray@ptg.contite ch.in
2.	CIPET: School For Advanced Research In Polymers (SARP)	Shri S.Majumdar, 9789991340 Shri M. Nagrajan, Shri D Srinivasan,	smajumdar@fennermail. com, smajumdar@jkfenner.co m,
3.	National Test House, Ghaziabad	9043640765 Shri D.N. Ray Shri B. Chakraborty	nthnr@rediffmail.com, nthsal- wb@nic.in, nthnr-ca@nic.in
4.	Neyveli Lignite Corporation Ltd Neyveli	Shri Ramakrishnan, 04142-228354,	g.m.con@nlcindia.com, ramakrishna.g@nlcindia. com
5.	Steel Authority Of India Ltd., New Delhi	Shri Sanjay Kumar, 8986880512 Shri Sanjay Kumar Singh	kumar.sanjay@sailcet.co. in, sanjayk.singh@sailcet.co .in
6.	Director Gen Of Quality Assurance New Delhi	"Shri C.B. Madana Manoharan Shri P.R. Gudapati, Shri K Parthiban, Shri K Aravindan,	ee-dgqa@nic.in cqaeaundh-dgqa@nic.in rkp_parthiban@yahoo.co .in
7.	Jain Transmission I Pvt Ltd, Indore, MP	Shri Sabyasachi Majumdar	sm@jtil.in
8.	MECON Limited, Ranchi	Shri Hp Das	hpdas@meconlimited.co.

## ITEM 7 INTERNATIONAL ACTIVITIES

**7.1** The Committee noted the information given at agenda Item no. 7.1, 7.2, 7.3 & 7.4. Committee deliberated and decided to increase the participation at ISO level meetings and under development documents as given below-

SI No.	Standard and/or project under the direct responsibility of ISO/TC 41/SC 4 Secretariat	Stage	ICS
1.	ISO/CD 12046	30.99	<ul><li>21.220.10</li><li>43.060.10</li></ul>
	Synchronous belt drives — Automotive belts — Determination of physical properties		10.0001.0

SL No.	Standard and/or project under the direct responsibility of ISO/TC 41/SC 3 Secretariat	Stage	ICS
1.	ISO/CD 5284	30.00	_
	Conveyor belts — List of equivalent terms		

SI No.	Standard and/or project under the direct responsibility of ISO/TC 41/SC 1 Secretariat	Stage	ICS
1.	ISO 11749	60.00	<ul><li>21.220.10</li><li>43.060.10</li></ul>
	Belt drives — V-ribbed belts for the automotive industry — Fatigue test		10.000.10

## **ISO Meetings**

Date	Month	Location	TC/SC	Note
14	November 2023	Virtual	ISO/TC 41/SC 3	_
5	December 2023	Virtual	ISO/TC 41/SC 4	_
12	December 2023	Virtual	ISO/TC 41/SC 1	
15	December 2023	Virtual	ISO/TC 41	

# ITEM 8 NATIONAL AND INTERNATIONAL LEVEL EVENTS TO BE PARTICIPATED IN

The Committee noted the information given at Agenda Item no. 8.

# ITEM 9 SCIENTIFIC JOURNALS AND PERIODICALS TO BE SUBSCRIBED

Committee noted the information given in the agenda Item 9.

### ITEM 10 CREATION OF POOL OF EXPERTS

Committee noted the information given in the agenda Item 10.

## ITEM 11 RESEARCH PROJECT TO BE TAKEN UP FOR INCLUSION OF EMPIRICAL DATA AND INSIGHTS

Committee noted the information given in the agenda Item 11.

### ITEM 12 DATE AND PLACE OF NEXT MEETING

Tentative committee meeting schedule has been approved for FY 2023-24 by the committee, schedule as given below-

S.N.	Meeting No	Date	Venue
1.	7 <sup>th</sup> meeting	25 July 2023	Hybrid meeting,
			BIS HQ
2.	8 <sup>th</sup> meeting	9th November 2023	Hybrid meeting,

					BIS HQ
3.	9 <sup>th</sup> meeting	15	Feb	2024	NTPC, Ranchi
		(Proposed)			(Proposed)

### **ITEM 13 ANY OTHER BUSINESS**

- **13.1** Committee noted the information given in the agenda Item 13.1.
- **13.2** Committee noted the information given in the agenda Item 13.2.

The committee discussed and approved the following Standards for ToR and also identified the Standards for consideration under ToR.

## PGD 40 – List of Standards approved for ToR:

SI. No.	IS No. & Year	Title
1.	<u>IS 1891 (Part 2):</u> <u>1993</u>	Conveyor and elevator textile belting - Specification Part 2 heat resistant belting Third Revision
2.	<u>IS 1891 (Part 3):</u> <u>1988</u>	Specification for rubber conveyor and elevator textile belting Part 3 oil resistant belting Second Revision
3.	<u>IS 1891 (Part 4):</u> <u>1978</u>	Specification for rubber conveyor and elevator belting Part 4 hygienic belting First Revision
4.	<u>IS 1891 (Part 5) :</u> <u>1993</u>	Conveyor and elevator textile belting - Specification Part 5 fire resistant belting for surface application
5.	<u>IS 3181 : 1992</u>	Conveyor belts - Fire resistant conveyor belting for underground mines and such other hazardous applications - Specification Second Revision

## PGD 40 –List of Standards identified for consideration under ToR:

SI. No.	IS No. & Year	Title
1.	<u>IS 10022 : 1981</u>	Specification for open ended cogged V - Belting
2.	<u>IS 10213 : 1982</u>	Specification for sandwich belting
3.	<u>IS 10229 : 1982</u>	Specification for open end V - Belts
4.	<u>IS 10288 : 1982</u>	Specification for belt - Fasteners plate type
5.	<u>IS 11038 : 1984</u>	Specification for endless hexagonal belts for agricultural machinery and groove section of corresponding pulley
6.	<u>IS 11842 : 1986</u>	Specification for pvc plastic hygienic belting
7.	<u>IS 12091 : 1987</u>	Specification for belt fasteners hook type
8.	<u>IS 12854 : 1989</u>	Power Transmission - Belts endless flat Used in lenix drive systems specification
9.	<u>IS 1370 : 1993</u>	Transmission belting - Friction surface rubber belting specification Third Revision
10.	<u>IS 13775 (Part 1):</u> <u>1993</u>	Conveyor belting - Solid woven cotton synthetic impregnated and unimpregnated - Specification Part 1 aeroslide belting for air gravity conveyor

11.	<u>IS 14261 : 1995</u>	Transmission devices - V - Belts endless narrow V - Belts for industrial use - Specification
12.	<u>IS 15143 : 2002</u>	Conveyor belting of elastomeric and steel cord construction for underground mines and such other hazardous applications - Specification
13.	<u>IS 1891 (Part 1):</u> 2021	CONVEYOR AND ELEVATOR TEXTILE BELTING SPECIFICATION PART 1 GENERAL PURPOSE BELTING Fifth Revision
14.	<u>IS 1891 (Part 2):</u> <u>1993</u>	Conveyor and elevator textile belting - Specification Part 2 heat resistant belting Third Revision
15.	<u>IS 1891 (Part 3):</u> <u>1988</u>	Specification for rubber conveyor and elevator textile belting Part 3 oil resistant belting Second Revision
16.	<u>IS 1891 (Part 4):</u> <u>1978</u>	Specification for rubber conveyor and elevator belting Part 4 hygienic belting First Revision
17.	<u>IS 1891 (Part 5):</u> <u>1993</u>	Conveyor and elevator textile belting - Specification Part 5 fire resistant belting for surface application
18.	<u>IS 2241 : 1976</u>	Specification for round leather belting for small machines First Revision
19.	<u>IS 2494 (Part 1) :</u> <u>1994</u>	V - Belts - Endless V - Belts for industrial purposes Part 1 general purpose - Specification Second Revision

20.	<u>IS 2494 (Part 2) :</u> <u>1993</u>	V - Belts - Endless V - Belts for industrial purposes Part 2 fire resistant and antistatic V - Belts - Specification
21.	<u>IS 3142 : 1993</u>	Pulleys - V - Grooved pulleys for endless V - Belts sections 2 A B C D and e and endless wedge belts sections SPZ SPA SPB and SPC - Specification Second Revision
22.	<u>IS 3181 : 1992</u>	Conveyor belts - Fire resistant conveyor belting for underground mines and such other hazardous applications - Specification Second Revision
23.	<u>IS 530 : 1976</u>	Specification for solid - Woven impregnated hair belting for power transmission Second Revision
24.	<u>IS 5593 : 1980</u>	Specification for belt fasteners Alligator Type First Revision
25.	<u>IS 5635 : 1983</u>	Specification for automotive V - Belt drives First Revision
26.	<u>IS 6580 : 1972</u>	Specification for train lighting belt fasteners
27.	<u>IS 9515 : 1980</u>	Specification for link V - Belts

## 13.3 Sustainability Advisory Group -

The Committee noted the information given at Agenda item 13.3.

## 13.4 The committee deliberated for QCO on V-Belts and Chains

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(IS2403) and decided to create awareness among these Industries through webinar/ seminar and industry exposure visits. Committee suggested to explore more experts in these fields as this committee has few experts in the above fields.

The Committee noted the information given at agenda Item no. 13.4.

#### ITEM 14 STANDARDS UNDER DEVELOPMENT

The Committee noted the information given at agenda Item no. 14.

### ITEM 15 PREPARATION OF ROLLING ACTION PLAN -

The Committee noted the information given at agenda Item no. 15.

### ITEM 16 MAPPING OF GOVERNMENT SCHEME -

The Committee noted the information given at agenda Item no. 16.

## **ITEM 17 ANY ENQUIRY TO BIS**

The Committee noted the information given at agenda Item no. 17.1 & 17.2.

