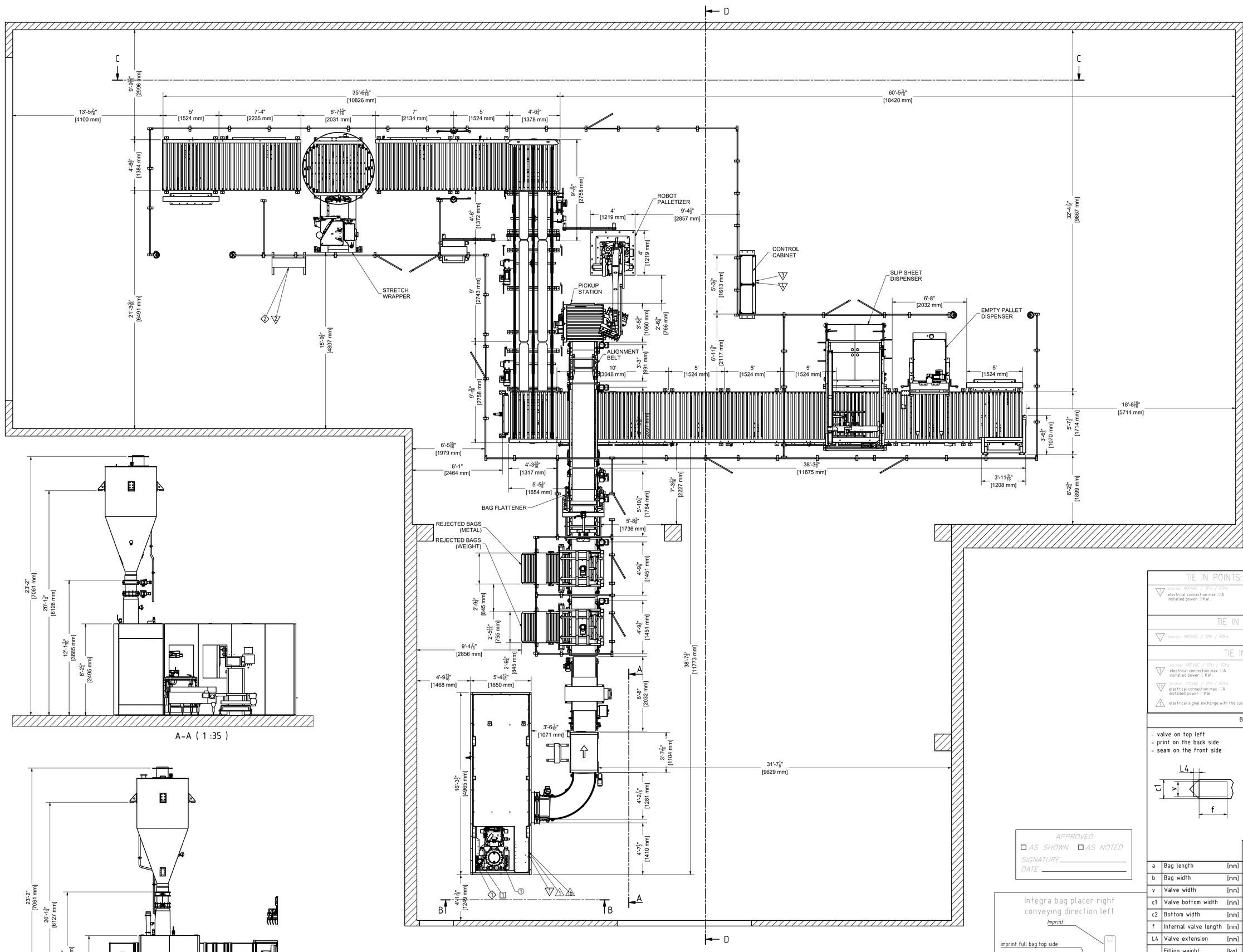
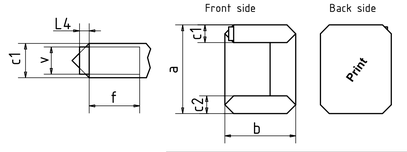


TIE IN POINTS: ROBOT AND CONVEYORS	
source: 480VAC / 3PH / 60Hz electrical connection max. ☐A installed power: ☐KW ;	source: 115VAC / 1PH / 60Hz electrical connection max. ☐A installed power: ☐KW ; compressed air connection: R1", 10m³/h p= 6 barg
TIE IN POINTS: WRAPPER	
source: 460VAC / 3PH / 60Hz	air required: 3CFM @ 80 PSI
TIE IN POINTS: INTEGRA	
source: 480VAC / 1PH / 60Hz electrical connection max. ☐A installed power: ☐KW ;	compressed air connection: R 1", 65 l/bag ; plus 15 l/hr per sec. operating time for the ejector p= 6 barg
source: 115VAC / 1PH / 60Hz electrical connection max. ☐A installed power: ☐KW ;	dedusting connection: 1500 Nm³/h ; p= 6 mbar DN120
electrical signal exchange with the customer	transport air connection: ? Nm³/h ; p= 8 mbar R 1½"

Bag design

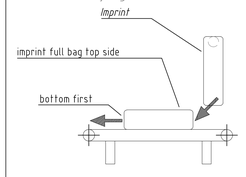
- valve on top left
- print on the back side
- seam on the front side



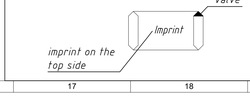
			Dimension min. - max.	1.	2.	Tolerance
a	Bag length	[mm]	350 - 650			+/- 10mm
b	Bag width	[mm]	300 - 600			+/- 5mm
v	Valve width	[mm]	160			+5mm / 0mm
c1	Valve bottom width	[mm]	-			+/- 5mm
c2	Bottom width	[mm]	-			+/- 5mm
f	Internal valve length	[mm]	130			+/- 5mm
L4	Valve extension	[mm]	50			+/- 5mm
	Filling weight	[kg]	min. 22,7			
	Material		paper			

APPROVED
☐ AS SHOWN ☐ AS NOTED
SIGNATURE
DATE

Integra bag placer right
conveying direction left



adjustment of the empty bag in the magazine



Nr/no	Änderung/revision	Datum/date	Name
2	Fixed Integra's tie points	11/9/2023	
1	Added Robot's tie points	11/8/2023	

REVISION HISTORY

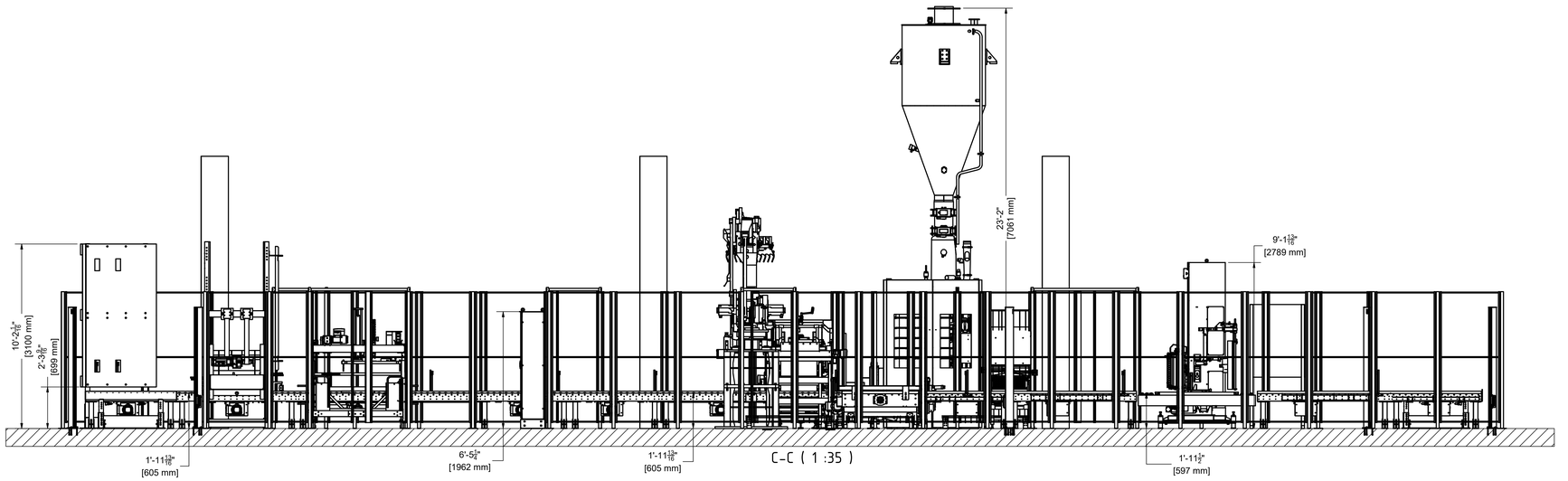
Maßstab/Scale: 1 :35	Zeichn.-Ersteller: BENSON HILL	Projekt-Nr. / Project no.: 2010565	Dokument / Project: BENSON HILL
ISO 128-30 / 3rd angle	Aufstellungsort/Ort / Installation place: CRESTON, IA		
Dokumentart / Document Type: Project Drawing	Erstellt durch / Created by: T.Diniz	Genehmigt durch / Approved by: B.STEPPELER	

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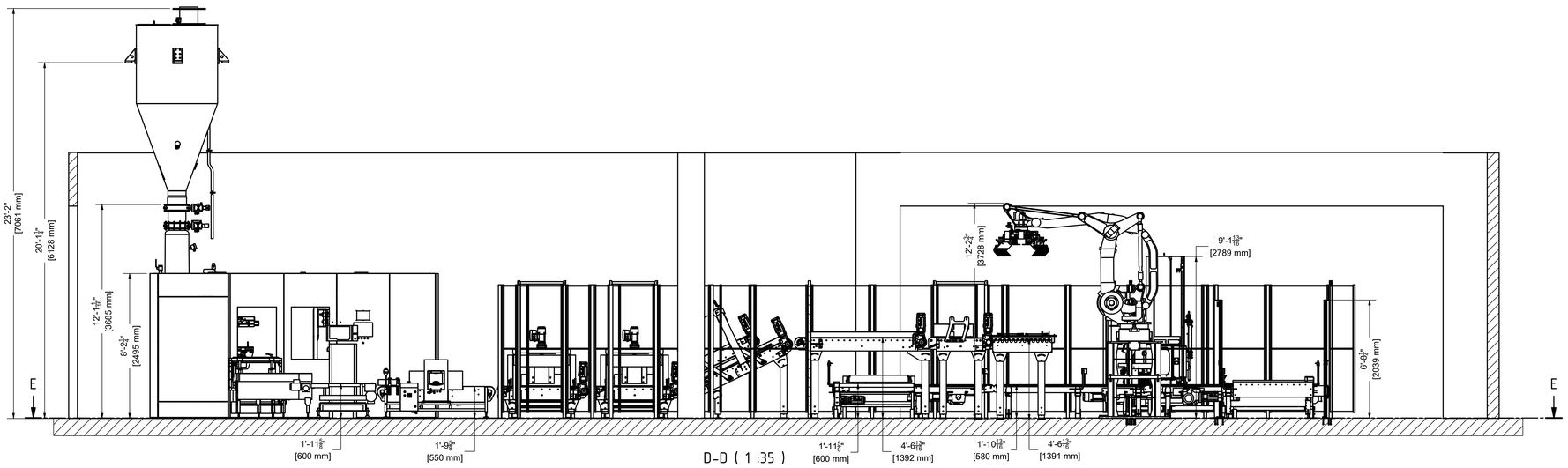
Titel / Title:
TVP BAGGING LINE
WITH ROBOT PALLETIZER & STRETCH WRAPPER

Datum / Date: 10/16/2023
Dokumentnr. / Document no.: HBU-000001235
Version: 2 | Sprache / Lang.: de-en | Blattnummer / Sheet no.: 1

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C-C (1 :35)



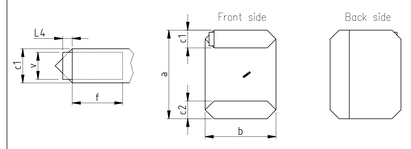
D-D (1 :35)

TIE IN POINTS

V electrical connection max 20A installed power: 6 KW ;	1 compressed air connection: R 1"; 65 l/bag ; plus 15 ltr per sec. operating time for the ejector pi: 6 barg
2 electrical signal exchange with the customer	3 dedusting connection: 1500 Nm³/h ; pi: 6 mbar DN120
	4 transport air connection: ? Nm³/h ; pi: 8 mbar R 1½"

Bag design

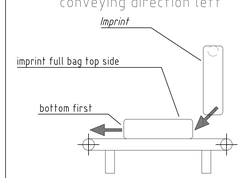
- valve on top left
- print on the front side
- seam on the back side



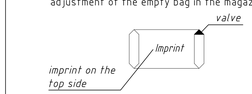
			Dimension min. – max.	1.	2.	Tolerance
a	Bag length	[mm]	350 – 650			+/– 10mm
b	Bag width	[mm]	300 – 600			+/– 5mm
v	Valve width	[mm]	160			+ 5mm /– 0mm
c1	Valve bottom width	[mm]	–			+/– 5mm
c2	Bottom width	[mm]	–			+/– 5mm
f	Internal valve length	[mm]	130			+/– 5mm
L4	Valve extension	[mm]	50			+/– 5mm
	Filling weight	[kg]	min.22,7			
	Material		paper			

APPROVED
☐ AS SHOWN ☐ AS NOTED
SIGNATURE:
DATE:

Integra bag placer right
conveying direction left

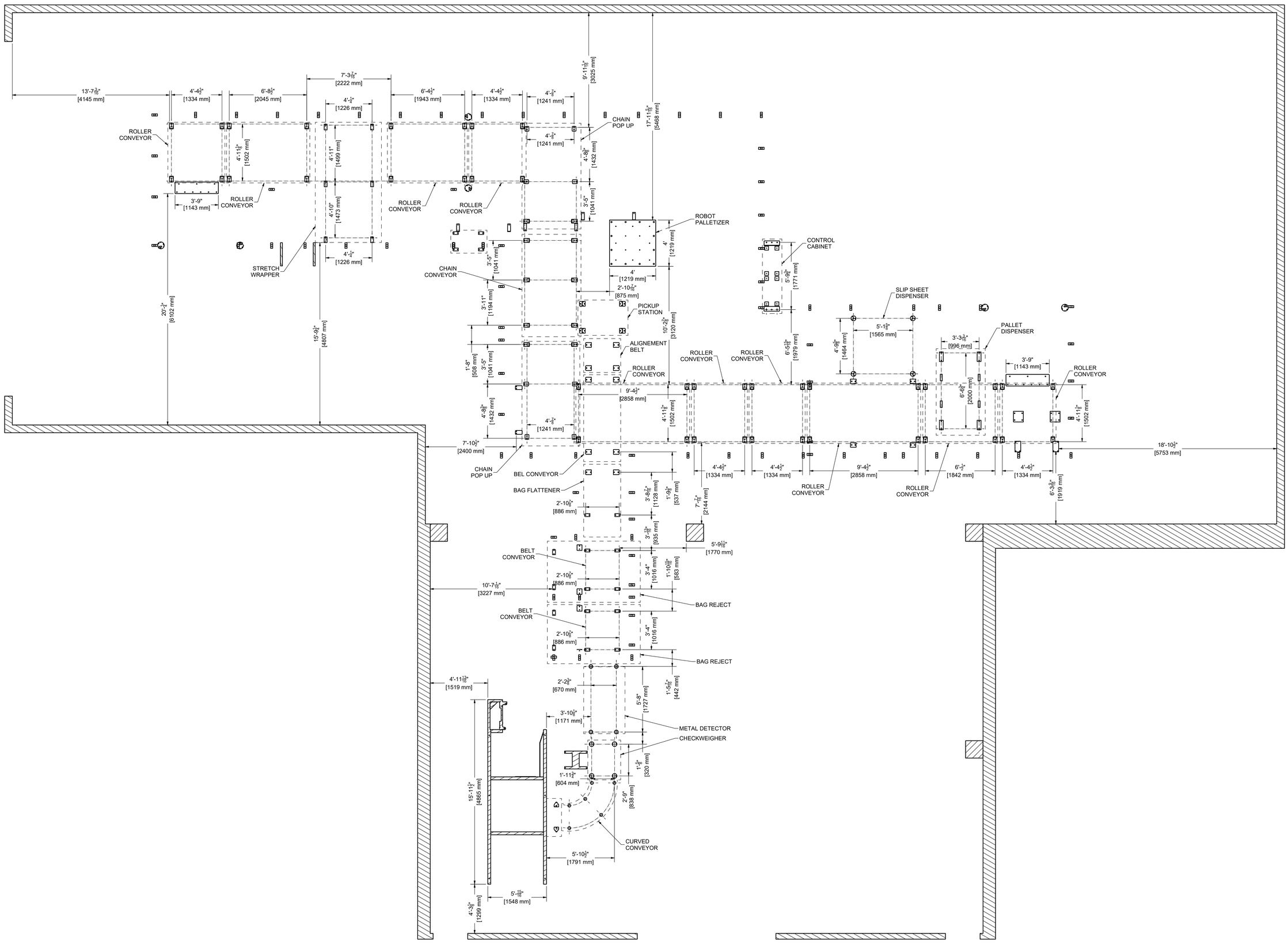


adjustment of the empty bag in the magazine



Maßstab / Scale: 1 :35	Kunde / Customer: BENSON HILL	Project Nr. / Project No.: 2010565	Kürzel / Project: BENSON HILL
ISO 128-30 / 3rd angle	Aufstellungsort / Installation place: CRESTON, IA		
Gezeichnet: Bel. / Draw. appr. HBU	Dokumentart / Document Type: Quotation Drawing	Erstellt durch / Created by: T.Diniz	Genehmigt durch / Approved by: B.STEPPELER
HAVER & BOECKER THE TECHNOLOGY GROUP	Titel / Title: TVP BAGGING LINE WITH ROBOT PALLETIZER & STRETCH WRAPPER		Erstellungsdatum / Date issued: 10/16/2023
			Zeichnungs-Nr. / Drawing Nr.: HBU-000001235
			Version / Index: 01 · Sprache / Language: de-en · Blatt / Sheet: 2

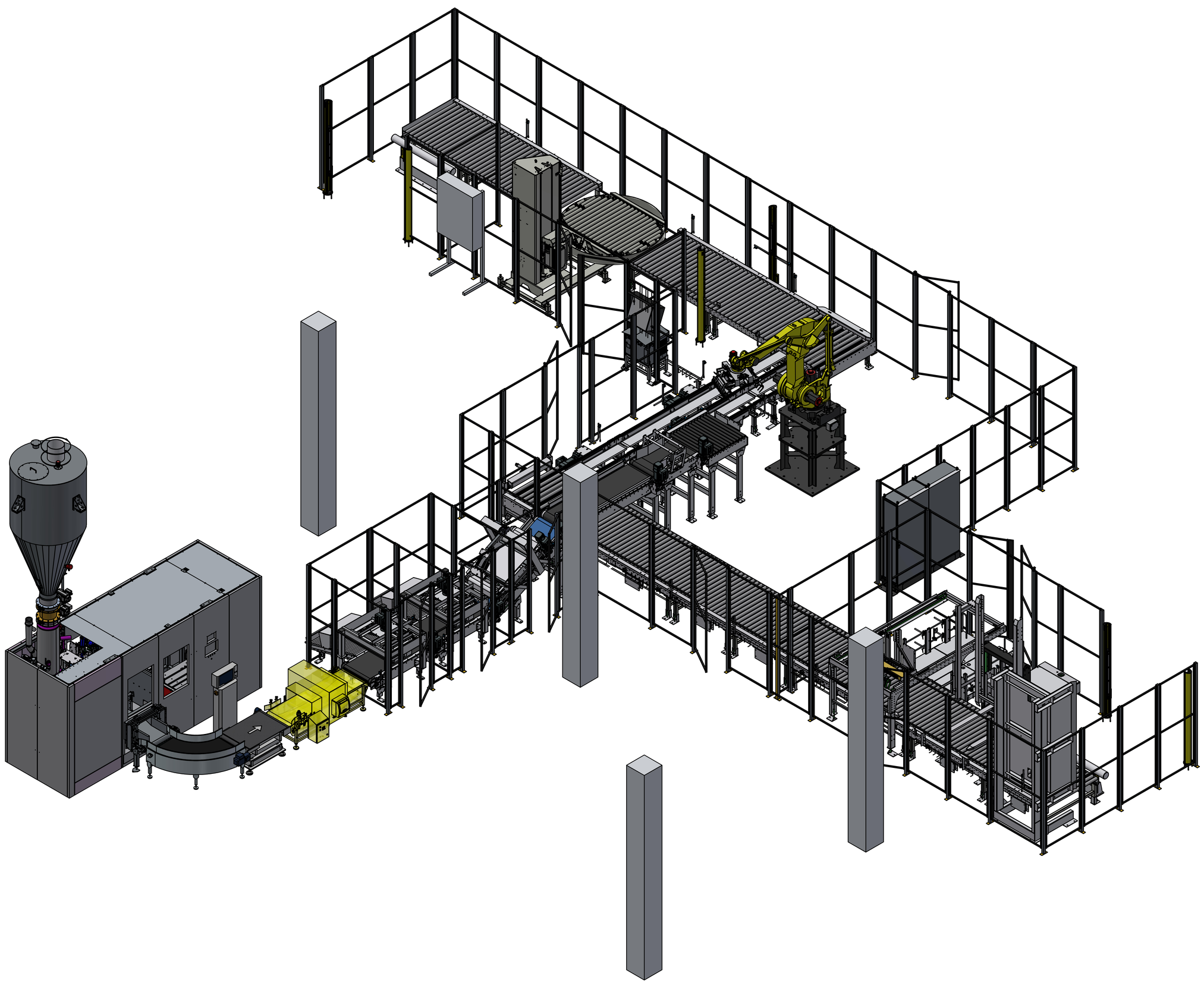
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E-E (1 :35)

Maßstab/Scale: 1 :35	Bearb./Author: BENSON HILL	Projekt Nr. / Project No.: 2010565	Kleinteil / Project: BENSON HILL
ISO 128-30 / 3rd angle	Zeichnungsart / Document type: CRESTON, IA		
Format/Size: HBU	Dokumententyp / Document type: Quotation Drawing	Erstellt durch / Created by: T.Diniz	Genehmigt durch / Approved by: B.STEPPELER
HAVER & BOECKER THE TECHNOLOGY GROUP	Titel / Title: TVP BAGGING LINE WITH ROBOT PALLETIZER & STRETCH WRAPPER		Erstelldatum / Date: 10/16/2023
			Zeichnungsnr. / Drawing Nr.: HBU-0000001235
			Version: 01 Sprache/Language: de-en Blatt/Sheet: 3

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Maßstab / Scale 1 : 25	Kunde / Customer BENSON HILL	Projekt Nr. / Project No. 2010565	Fabrikanlage / Project BENSON HILL
ISO 128-30 / 3rd angle	Aufstellungsort und / Installation place CRESTON, IA		
Dokument Nr. / Prog. Ref.	Dokumentart / Document Type	Bearb. durch / Created by	Genehmigt durch / Approved by
HBU	Quotation Drawing	T.Diniz	B.STEPPELER
HAVER & BOECKER THE TECHNOLOGY GROUP	Titel / Title TVP BAGGING LINE WITH ROBOT PALLETIZER & STRETCH WRAPPER		Erstellungsdatum / Issue date 10/16/2023
			Dokument Nr. / Document No. HBU-000001235
			Revision 01
			Sprache / Language de-en
			Blatt / Sheet 4