

## **DO RING VERTICAL PRODUCTION STALEFIBROBETONNYH vibropressing with mixed reinforcement**

***M.O. Davydenko, Ph.D.***

*In the article the results of calculations of three-dimensional computer model of wall ring diameter 2500 mm, height 1200 mm for developing technical documentation for reinforcing wall rings with steel fiber and single wire mesh, instead of two as required by local regulations.*

***Klltsi, vibropressing, reinforcement, production.***

**Resolutionska problem.** Uselast one dual circular reinforcement in the manufacture of reinforced concrete wall rings with a diameter of 2500 mm is irrational because of the complexity of manufacturing frames and increasing the thickness of concrete cover.

**AnaLease Finalnnih dossurvey findings.**

Whirlpoolishennya dandtion samplesLemma can be made using steel fiber [1, 2]. For the development of technical documentation for reinforcing wall ring diameter 2500 mm, height 1200 mm with steel fiber and single wire mesh, instead of two, in accordance with the requirements of GOST 8020 [3], it was necessary to perform calculations wall ring with the development of a computer model with an appropriate combination loads. Output for work were presented JSC "Combine Construction Industry" (m. Kyiv) as separate thumbnails.

**Metand lit.idzhen.** Aboutto ground technology youhotovlennya

stalefibrobetonnyh rings vertical vibropressing mixed reinforcement.

**Rezultaty dperssurvey findings.** Calcexpense  
threedimensional

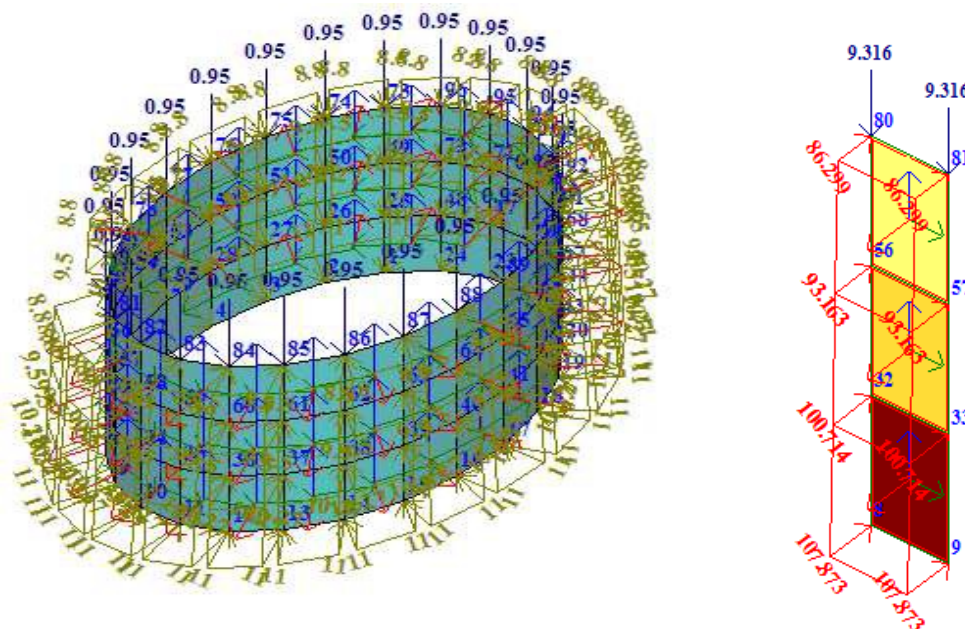
CompCybernetic model of wall ring diameter 2500 mm, height 1200 mm were made using software system "Lira- Windows», version 9.4. When you create a universal model was used rectangular shell element. The results of the calculation are plates for membrane tension and bending stresses. Diagram finite element model adopted in the form of a cylindrical shell surface of revolution, which consists of plate elements shell rotation. The calculation of wall rings were considered operational load

ZAZthe required set in the table. 1. Constant gravity load design wall ring made according to drawings provided by the customer.

1. **Load** *pricktype* have been concluded to three-dimensional comp 'Books models.

Nu mb er	Name and type of load	In theelychyna load (normative) kN	Koefitsiyent reliability load yum	In theelychyna Categori estion avanta- (calculation
1	Vlasna weight structures	In therahovuyetsy a the calculation modeli 24	1.1	
2	Load cover well		1.1	26.4
3	In theertykalnyy and lateral pressure sprinkled soil at a depth of 4.6 m	8.28	1.3	1076

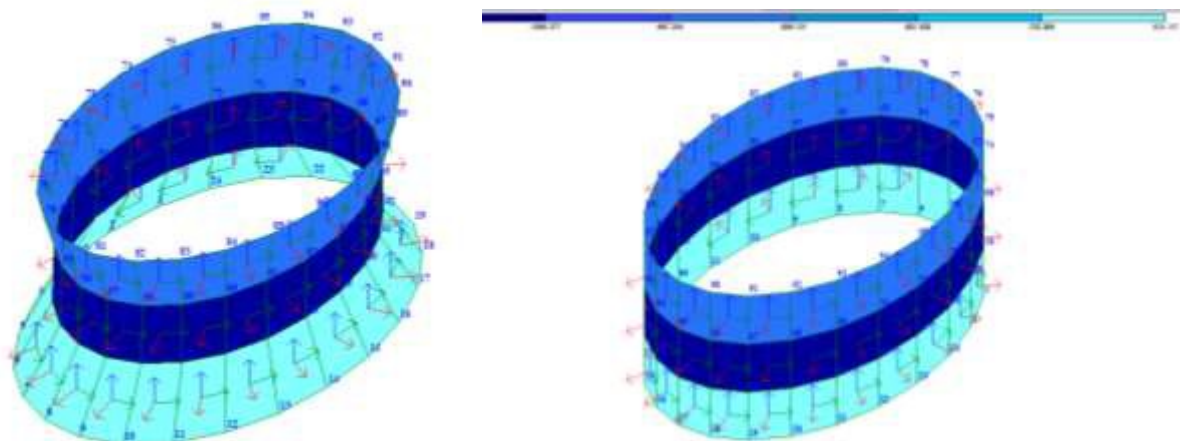
General view of a computer model of wall ring shown in Fig. 1 piece model of the load of the weight of the rings located above ground and pressure.



Ric. 1. General view of a piece of computer models and wall ring.

Deforpro circuit and horizontal distribution of stresses in the wall ring shown in Fig. 2. The result of the calculation of a computer model of wall ring set: maximum

horizontal stress (circumferential) direction comprised:  $N_x = -1194,89 \text{ kN} / \text{m}^2$ ; maximum stress in the vertical direction were:  $nln = -225.52 \text{ kN} / \text{m}^2$ ; maximum in horizontal direction:  $M_x = 0.294 \text{ (kN} \cdot \text{m) / m}$ ; moment in the vertical direction:  $M_u = 1.489 \text{ (kN} \cdot \text{m) / m}$ .



Ric. 2. deformed pattern and distribution of horizontal stress in the wall ring.

Pidbir wall reinforcement ring is made using a software module "LIR-ARM" to effect maximum horizontal stress (circumferential) direction ( $N_x = -1194,89 \text{ kN} / \text{m}^2$ ) and the bending moment acting in the horizontal direction  $M_x =$

$= 0.294 \text{ (kN} \cdot \text{m) / m}$

maximum stress in the vertical direction ( $= nln = -22552 \text{ forN} / \text{m}^2$ ) and the maximum moment acting in the vertical direction  $M_u = 1.489 \text{ (kN} \cdot \text{m) / m}$  (vertical reinforcement)

DA plate elements, which is modeled shell wall ring fittings designed in two directions per meter length: AS1 - area of reinforcement along the axis X1; AS2 - area of reinforcement along the axis Y1.

Reinforced wall of the ring for the calculation navedennyye signs in the table. 2 compared with a series 3.900.1-14. The strength of the concrete walls of the new ring class C20 / 25 in compression is  $R_b = 14,5 \text{ MPa} > 11.94 \text{ MPa}$  stress in the horizontal (circumferential direction).

About studies vedennyye give Osnovanie to perform armyrovanyya of steel fybroy stenovyh kolets diameter of 1000 mm.

DT o armyrovanyya stenovyh kolets diameter 2500 mm, 1200 mm vysotoy, vypuskayemyh OAO "Kombinat Stroyndustryiya" yspolizovanye One lysh of steel fybry enough. Outgoing Ratsyonalno smeshannoe armyrovanye of steel and fybroy odynarnym metallis frame, instead of two to GOST 8020 [3].

## 2. Result and rozrahunkovoh about Article and new for ltsi.

ARMU of

The most loaded element (section)	Andrmuvannya determined by calculation	Andrmuvannya COP 25.12, according to a series 3.900.1-14
Andrmatura along the axis X1 (ring)		
72 element	C1Ø 8, S = 200 mm (1.26 cm2)	C 32 ØAIII 5/250 (1.96 cm2)
		C 17 Ø10/150 AIII (2.36 cm2)
Andrmatura U1 along the axis (vertical)		
72 element mm	C1 Ø 8, S = 200 (1.26 cm2)	C 32 Ø10/150 AIII (29.82 cm2)
		C 17 Ø5/250 AIII (3.136 cm2)

On the grounds of research is designed provedennyyh documentation for commercial-armyrovanyyu of steel and fybroymetallismetallis frame of wall kolets Ø 2500 mm, 1200 mm vysotoy.

**Conclusion.** Aboutled daboutslidzhennya dayutb Sectionidstavu dll

performance of steel fiber reinforcement wall ring diameter 1000 mm. For wall reinforcement ring diameter 2500 mm, height 1200 mm, produced by JSC "Combine Construction Industry" use of steel fiber alone is not enough. Rationally perform mixed steel fiber reinforcement and a single metal frame, instead of two to GOST 8020 [3]. Based on research developed the technical documentation for steel fiber reinforcement and a single metal frame wall rings Ø 2500 mm, height 1200 mm.

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*In Article pryvedeny Results calculating three-dimensional Computer models of the wall RING diameter 2500 mm, 1200 mm vysotoy for development Tehnicheskoe documentation for armyrovanyya stenovyh kolets co fybroy of steel and odynarnoy metallycheskoy setkoy, instead of two in accordance with the Requirements otechestvennyh standards.*

***Co.Itso, vybropressovka, armyrovanye, manufacture.***

*The paper presents the results of calculation of three-dimensional computer model of wall rings of diameter 2500 mm, height 1200 mm for the development of technical documentation for reinforcing of wall rings with steel fiber and single metal grid, instead of two, in accordance with national standards.*

***Wall rings, vibropressing, reinforcing, production.***

UDC 631.1

## **ENGINEERING MONITORING THE EXTENT OF LEGAL REGULATION OF INNOVATION POLICY AIC UKRAINE IN THE USE OF LIFE**

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*The article examines the influence of regulation methods for monitoring the efficiency of agricultural machinery innovation policy AIC Ukraine.*

***Monitorynh, method, technique.***

**Resolutionska problem.** According to the definition, monitoring - (kontrolyuvavaty, warn, check) - data collection, data in the mass media, driving DSD [1].

It is well known that by definition - information activity is information gathering, analysis and dissemination within its legal regulation. Also, as you know, as defined

– RoseReconnaissance activities of this collection of information, analysis and processing for use in government [2-6].

Stillof way - monitoring - a qualified type of information within regulation [7-14].

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